

621

<210> 655  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 655  
 Ala Thr Gln Leu Leu Ser Ser Phe Ser Val Gly Pro Leu Leu Gln Ile  
           1                  5                  10                  15  
 Thr Phe Tyr Glu Asp Lys Asn Phe Gln Gly Arg Arg Tyr Asp Cys Asp  
                   20                  25                  30  
 Cys Asp Cys Ala Asp Xaa His Thr Tyr Leu Ser Arg Cys Asn Ser Ile  
           35                  40                  45  
 Lys Val Glu Gly Gly Thr Trp Ala Val Tyr Glu Arg Pro Asn Phe Ala  
           50                  55                  60  
 Gly Tyr Met Tyr Ile Leu Pro Gln Gly Glu Tyr Pro Glu Tyr Gln Arg  
           65                  70                  75                  80  
 Trp Met Gly Leu Asn Asp Arg Leu Ser Ser Xaa Arg Ala Val Ser Ser  
                   85                  90                  95  
 Ala

<210> 656  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (59)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

622

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 656

Asp Ala Asp Leu Val Ile Trp Asp Pro Asp Ser Val Lys Thr Ile Ser  
 1 5 10 15

Ala Lys Thr His Asn Ser Ser Leu Glu Tyr Asn Ile Phe Glu Gly Met  
 20 25 30

Glu Cys Arg Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val  
 35 40 45

Leu Glu Asp Gly Thr Leu His Val Thr Glu Xaa Ser Gly Arg Tyr Ile  
 50 55 60

Pro Arg Lys Pro Phe Pro Asp Phe Xaa Tyr Lys Arg Ile Lys Ala Arg  
 65 70 75 80

Ser Arg Leu Ala Glu Leu Arg Gly Val Pro Arg Gly Leu Tyr Asp Gly  
 85 90 95

Pro Val Cys Glu Val Ser Val Thr Pro Lys Thr Val Thr Pro Ala Ser  
 100 105 110

Ser Ala Lys Thr Ser Pro Ala Lys Gln Gln Ala Pro Pro Val Arg Asn  
 115 120 125

Leu His Gln Ser Gly Phe Ser Leu Ser Gly Ala Gln Ile Asp Asp Asn  
 130 135 140

Ile Pro Arg Arg Thr Thr Gln Arg Ile Val Ala Pro Pro Gly Gly Arg  
 145 150 155 160

Ala Asn Ile Thr Ser Leu Gly  
 165

&lt;210&gt; 657

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

623

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 657

Xaa	Ser	Leu	Asn	Leu	Xaa	Lys	Leu	Ala	Leu	His	Arg	Gly	Gly	Gly	Arg
1				5					10					15	
Ser	Arg	Thr	Ser	Gly	Ser	Pro	Gly	Leu	Xaa	Glu	Phe	Gly	Thr	Ser	Ala
		20					25						30		
Val	Leu	Leu	Arg	Leu	Gly	Asp	Glu	Leu	Glu	Met	Ile	Arg	Pro	Ser	Val
	35					40						45			
Tyr	Arg	Asn	Val	Ala	Arg	Gln	Leu	His	Ile	Ser	Leu	Gln	Ser	Glu	Pro
	50					55					60				
Val	Val	Thr	Asp	Ala	Phe	Leu	Ala	Val	Ala	Gly	His	Ile	Phe	Ser	Ala
	65				70					75				80	
Gly	Ile	Thr	Trp	Gly	Lys	Val	Val	Ser	Leu	Tyr	Ala	Val	Ala	Ala	Gly
			85						90					95	
Leu	Ala	Val	Asp	Cys	Val	Arg	Gln	Ala	Gln	Pro	Ala	Met	Val	His	Ala
		100						105					110		
Leu	Val	Asp	Cys	Leu	Gly	Glu	Phe	Val	Arg	Lys	Thr	Leu	Ala	Thr	Trp
	115						120						125		
Leu	Arg	Arg	Arg	Gly	Gly	Trp	Thr	Asp	Val	Leu	Lys	Cys	Val	Val	Ser
	130					135					140				
Thr	Asp	Pro	Gly	Leu	Arg	Ser	His	Trp	Leu	Val	Ala	Ala	Leu	Cys	Ser
	145				150					155				160	
Phe	Gly	Arg	Phe	Leu	Lys	Ala	Ala	Phe	Phe	Val	Leu	Leu	Pro	Glu	Arg
			165						170					175	

&lt;210&gt; 658

&lt;211&gt; 137

&lt;212&gt; PRT

624

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (91)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (101)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (124)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 658

Gly	Pro	Val	Gly	Ser	Ser	Ser	Glu	Ala	Pro	Arg	Gly	Ala	Gly	Asp	Ala
1				5					10					15	

Gly	Met	Ala	Gly	Glu	Leu	Thr	Pro	Glu	Glu	Ala	Gln	Tyr	Lys	Lys	
			20					25				30			

Ala	Phe	Ser	Ala	Val	Asp	Thr	Asp	Gly	Asn	Gly	Thr	Ile	Asn	Ala	Gln
		35					40					45			

Glu	Leu	Gly	Ala	Ala	Leu	Lys	Ala	Thr	Gly	Lys	Asn	Leu	Ser	Glu	Ala
	50					55					60				

Gln	Leu	Arg	Lys	Leu	Ile	Ser	Glu	Val	Asp	Xaa	Asp	Gly	Asp	Gly	Glu
65					70					75					80

Ile	Ser	Phe	Gln	Glu	Phe	Leu	Thr	Ala	Ala	Xaa	Lys	Ala	Arg	Ala	Gly
				85						90				95	

625

Leu Glu Asp Leu Xaa Val Ala Phe Arg Ala Phe Asp Gln Asp Gly Asp  
                   100                                  105                                  110  
 Gly His Ile Thr Val Asp Glu Leu Arg Arg Ala Xaa Ala Gly Leu Gly  
                   115                                  120                                  125  
 Xaa Leu Xaa Glu Ile Asp His Phe Gly  
                   130                                  135

<210> 659  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (30)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 659  
 Pro Xaa Ser Arg Gln Asp Val Met Asp Ile Val Phe Ile Glu Gln Leu  
   1                  5                                  10                                  15

Ser Val Ile Thr Thr Ile Gly Val Tyr Asp Trp Xaa Gln Xaa Ser Asn  
                   20                                  25                                  30

Arg Ser

<210> 660  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 660  
 Asn Pro Ile Ser Pro Lys Asn Tyr Lys Lys Ile Ser Gln Ala Gln Ser  
   1                  5                                  10                                  15

626

Gln Leu Pro Val Ile Pro Ala Thr Gln Glu Ala Glu Ser Gly Glu Ser  
                   20                  25                  30

Leu Gly Pro Gly Ala Ala Glu Val Asn Ser Glu Pro Arg Leu His His  
           35                  40                  45

Arg Thr Pro Ala Trp Ile Thr Lys  
       50                  55

&lt;210&gt; 661

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 661

Tyr Ile Gly Phe Val Ile Leu Val Phe Phe Ala Ser Ser Tyr Val Lys  
   1                  5                  10                  15

Glu Ile Asp Asn Lys Ile Leu Asn Asn Lys Lys Lys Xaa Lys Xaa Ser  
           20                  25                  30

Ser Lys Gly Xaa Val Ala Xaa Ala Ile  
       35                  40

&lt;210&gt; 662

&lt;211&gt; 524

627

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (124)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (191)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 662

Cys	Glu	Ala	Trp	Arg	Gly	Arg	Ala	Asp	Pro	Gly	Gly	Gln	Ser	Cys	Leu
1				5					10					15	
Gln	Ala	Leu	Gln	Asn	Ser	Thr	Ala	Pro	Gln	His	Pro	Gly	Leu	His	Arg
			20					25					30		
Trp	Thr	Gly	Asp	Arg	Lys	Met	Pro	Pro	Arg	Arg	Asp	Arg	Gly	Cys	Asp
		35					40					45			
Pro	Val	Gly	Asn	Ile	Pro	Gln	Gly	Glu	Ser	Gly	Gly	Trp	Trp	Pro	Glu
	50					55						60			
Gly	Ala	Gly	Asp	Leu	Leu	Gly	Ala	Thr	Pro	Asp	Arg	Glu	Ser	Pro	Gln
65					70					75					80
Leu	Pro	Gly	Gln	Arg	Leu	Gln	Pro	His	Pro	Gln	Gln	Cys	Leu	His	Gly
				85					90					95	
Arg	Arg	Val	Arg	Gly	Pro	Ser	Trp	Arg	Val	Glu	Ala	Trp	Gly	Pro	Gly
			100					105					110		
Leu	His	Val	Phe	Gly	Pro	Gly	Gln	Arg	Trp	Gly	Xaa	Ser	Pro	Gln	Gly
	115						120					125			
Ile	Pro	Glu	Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser
	130					135					140				
Gly	Arg	Val	Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly
145					150					155				160	
Cys	Leu	Ile	Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala
				165					170					175	
Leu	Arg	Asn	Pro	Gly	Lys	Ile	Pro	Lys	Thr	Leu	Val	Pro	His	Xaa	Cys
		180						185						190	
Lys	Leu	Val	Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe

628

195	200	205
Leu Gln Asn Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val 210	215	220
Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu 225	230	235 240
Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro 245	250	255
Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe 260	265	270
Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val 275	280	285
Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val 290	295	300
Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu 305	310	315 320
Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val 325	330	335
Asn Thr Gln Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn 340	345	350
Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro 355	360	365
Lys Leu Asn Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala 370	375	380
Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr 385	390	395 400
Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His 405	410	415
Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala 420	425	430
Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu 435	440	445
Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly 450	455	460
Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala		



629

465                      470                      475                      480  
 Phe Gly Ala Ser Cys Pro Asn Trp Ser Leu Cys Arg Arg Thr Arg Pro  
                                  485                      490                      495  
 Ser Trp Arg Lys Trp Arg Arg Met Ser Met Gln Pro Pro Ala Leu Ala  
                                  500                      505                      510  
 Trp Glu Glu Pro Gln Leu Ala Gly Gln Ala Gly Pro  
                                  515                      520

<210> 663  
 <211> 272  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 663  
 Pro Thr Leu Asp Ser Ala Arg Ser Leu Ser Met Arg Ala Pro Ser Leu  
   1                                  5                                  10                                  15  
 Thr Pro Ser Ala Ala Pro Leu Ser Thr Trp Pro Leu Xaa Ile Leu Val  
                                   20                                  25                                  30  
 Arg Ser Gly His Asn Arg Ala Val Asp Trp Trp Ser Leu Gly Ala Leu  
                                   35                                  40                                  45  
 Met Tyr Asp Met Leu Thr Gly Ser Pro Pro Phe Thr Ala Glu Asn Arg  
   50                                  55                                  60  
 Lys Lys Thr Met Asp Lys Ile Ile Arg Gly Lys Leu Ala Leu Pro Pro  
   65                                  70                                  75                                  80  
 Tyr Leu Thr Pro Asp Ala Arg Asp Leu Val Lys Lys Phe Leu Lys Arg  
                                   85                                  90                                  95  
 Asn Pro Ser Gln Arg Ile Gly Gly Gly Pro Gly Asp Ala Ala Asp Val  
                                   100                                  105                                  110  
 Gln Arg His Pro Phe Phe Arg His Met Asn Trp Asp Asp Leu Leu Ala  
                                   115                                  120                                  125  
 Trp Arg Val Asp Pro Pro Phe Arg Pro Cys Leu Gln Ser Glu Glu Asp  
   130                                  135                                  140

630

Val Ser Gln Phe Asp Thr Arg Phe Thr Arg Gln Thr Pro Val Asp Ser  
 145 150 155 160  
 Pro Asp Asp Thr Ala Leu Ser Glu Ser Ala Asn Gln Ala Phe Leu Gly  
 165 170 175  
 Phe Thr Tyr Val Ala Pro Ser Val Leu Asp Ser Ile Lys Glu Gly Phe  
 180 185 190  
 Ser Phe Gln Pro Lys Leu Arg Ser Pro Arg Arg Leu Asn Ser Ser Pro  
 195 200 205  
 Arg Ala Pro Val Ser Pro Leu Lys Phe Ser Pro Phe Glu Gly Phe Arg  
 210 215 220  
 Pro Ser Pro Ser Leu Pro Glu Pro Thr Glu Leu Pro Leu Pro Pro Leu  
 225 230 235 240  
 Leu Pro Pro Pro Pro Pro Ser Thr Thr Ala Pro Leu Pro Ile Arg Pro  
 245 250 255  
 Pro Ser Gly Thr Lys Lys Ser Lys Arg Gly Arg Gly Arg Pro Gly Arg  
 260 265 270

&lt;210&gt; 664

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (99)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 664

Gly Thr Arg Arg Glu Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu  
 1 5 10 15  
 Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu  
 20 25 30  
 Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly  
 35 40 45  
 Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr  
 50 55 60

631

Gly Pro His Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg  
65 70 75 80

Ala Leu Val Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu  
85 90 95

Arg Lys Xaa Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu  
100 105 110

Gln Leu Arg Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro  
115 120 125

Arg Ser Gln Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly  
130 135 140

Thr Tyr Ala Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala  
145 150 155 160

Gly Ile Pro Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val  
165 170 175

Asp Gly Thr Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly  
180 185 190

Gly Pro Gln Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala  
195 200 205

Leu Leu Glu Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val  
210 215 220

Leu Glu Ala Ala Ala Gln Ala Ala Arg Asp Val His Thr Leu Leu Asp  
225 230 235 240

Arg Val Val Arg Gln His Val Arg Glu Ala Ser Ile Leu Leu Gly Asp  
245 250 255

&lt;210&gt; 665

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

632

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 665

Pro	Arg	Gly	Asp	Lys	Ala	Arg	Thr	Xaa	Pro	Pro	Ala	Ala	Ser	Ala	Arg
1				5					10					15	

Pro	Ser	Arg	Ser	Lys	Arg	Gly	Gly	Glu	Glu	Arg	Val	Leu	Glu	Lys	Glu
			20					25					30		

Glu	Glu	Glu	Asp	Asp	Asp	Glu	Asp	Glu	Asp	Glu	Glu	Asp	Asp	Val	Ser
		35					40					45			

Glu	Gly	Ser	Glu	Val	Pro	Glu	Ser	Asp	Arg	Pro	Ala	Gly	Ala	Gln	His
	50						55					60			

His	Gln	Leu	Asn	Gly	Glu	Arg	Gly	Pro	Gln	Ser	Ala	Lys	Glu	Arg	Val
65					70					75					80

Lys	Glu	Trp	Thr	Pro	Cys	Gly	Pro	His	Gln	Gly	Gln	Asp	Glu	Gly	Arg
				85					90					95	

Gly	Pro	Ala	Pro	Gly	Ser	Gly	Thr	Arg	Gln	Val	Phe	Ser	Met	Ala	Ala
		100						105					110		

Met	Asn	Lys	Glu	Gly	Gly	Thr	Ala	Ser	Xaa	Ala	Thr	Gly	Pro	Asp	Ser
	115						120					125			

Pro	Ser	Pro	Val	Pro	Leu	Pro	Pro	Gly	Lys	Pro	Ala	Leu	Pro	Gly	Ala
	130					135					140				

Asp	Gly	Thr	Pro	Phe	Gly	Cys	Pro	Pro	Gly	Arg	Lys	Glu	Lys	Pro	Ser
145					150					155					160

Asp	Pro	Val	Glu	Trp	Thr	Val	Met	Asp	Val	Val	Glu	Tyr	Phe	Thr	Glu
			165						170					175	

Ala	Gly	Phe	Pro	Glu	Gln	Ala	Thr	Val	Phe	Gln	Glu	Gln	Glu	Ile	Asp
		180						185					190		

Gly	Lys	Ser	Leu	Leu	Leu	Met	Gln	Arg	Thr	Asp	Val	Leu	Thr	Gly	Leu
	195						200					205			

Ser	Ile	Arg	Leu	Gly	Pro	Ala	Leu	Lys	Ile	Tyr	Glu	His	His	Ile	Lys
	210					215					220				

Val	Leu	Gln	Gln	Gly	His	Phe	Glu	Asp	Asp	Asp	Pro	Asp	Gly	Phe	Leu
225					230					235					240

633

Gly

&lt;210&gt; 666

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 666

Val Thr Gly Gly Gly Ala Val Val Leu Gly Ala Glu Ser His Ala Ser  
 1 5 10 15

Lys Asp Val Ala Ile Asp Met Met Asp Ser Arg Thr Ser Gln Gln Leu  
 20 25 30

Gln Leu Ile Asp Glu Gln Asp Ser Tyr Ile Gln Ser Arg Ala Asp Thr  
 35 40 45

Met Gln Asn Ile Glu Ser Thr Ile Val Glu Leu Gly Ser Ile Phe Gln  
 50 55 60

Gln Leu Ala His Met Val Lys Glu Gln Glu Thr Ile Gln Arg Ile  
 65 70 75 80

Asp Glu Asn Val Leu Gly Ala Gln Leu Asp Val Glu Ala Ala His Ser  
 85 90 95

Glu Ile Leu Lys Tyr Phe Gln Ser Val Thr Ser Asn Arg Trp Leu Met  
 100 105 110

Val Lys Ile Phe Leu Ile Leu Ile Val Phe Phe Ile Ile Phe Val Val  
 115 120 125

Phe Leu Ala  
 130

&lt;210&gt; 667

&lt;211&gt; 652

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 667

Leu Ser Trp Asn Arg Tyr Thr Ser Val Ser Pro Leu His Arg Ser Leu  
 1 5 10 15

Gln Leu Pro Pro Arg Val Ser Gly Val Arg Cys Asp Gln Cys Ala Arg

634

20	25	30
Gly Phe Ser Gly Ile Phe Pro Ala Cys His Pro Cys His Ala Cys Phe		
35	40	45
Gly Asp Trp Asp Arg Val Val Gln Asp Leu Ala Ala Arg Thr Gln Arg		
50	55	60
Leu Glu Gln Arg Ala Gln Glu Leu Gln Gln Thr Gly Val Leu Gly Ala		
65	70	75
Phe Glu Ser Ser Phe Trp His Met Gln Glu Lys Leu Gly Ile Val Gln		
85	90	95
Gly Ile Val Gly Ala Arg Asn Thr Ser Ala Ala Ser Thr Ala Gln Leu		
100	105	110
Val Glu Ala Thr Glu Glu Leu Arg Arg Glu Ile Gly Glu Ala Thr Glu		
115	120	125
His Leu Thr Gln Leu Glu Ala Asp Leu Thr Asp Val Gln Asp Glu Asn		
130	135	140
Phe Asn Ala Asn His Ala Leu Ser Gly Leu Glu Arg Asp Arg Leu Ala		
145	150	155
Leu Asn Leu Thr Leu Arg Gln Leu Asp Gln His Leu Asp Leu Leu Lys		
165	170	175
His Ser Asn Phe Leu Gly Ala Tyr Asp Ser Ile Arg His Ala His Ser		
180	185	190
Gln Ser Ala Glu Ala Glu Arg Arg Ala Asn Thr Ser Ala Leu Ala Val		
195	200	205
Pro Ser Pro Val Ser Asn Ser Ala Ser Ala Arg His Arg Thr Glu Ala		
210	215	220
Leu Met Asp Ala Gln Lys Glu Asp Phe Asn Ser Lys His Met Ala Asn		
225	230	235
Gln Arg Ala Leu Gly Lys Leu Ser Ala His Thr His Thr Leu Ser Leu		
245	250	255
Thr Asp Ile Asn Glu Leu Val Cys Gly Ala Pro Gly Asp Ala Pro Cys		
260	265	270
Ala Thr Ser Pro Cys Gly Gly Ala Gly Cys Arg Asp Glu Asp Gly Gln		
275	280	285
Pro Arg Cys Gly Gly Leu Ser Cys Asn Gly Ala Ala Ala Thr Ala Asp		

635

290	295	300
Leu Ala Leu Gly Arg Ala Arg His Thr Gln Ala Glu Leu Gln Arg Ala		
305	310	315 320
Leu Ala Glu Gly Gly Ser Ile Leu Ser Arg Val Ala Glu Thr Arg Arg		
	325	330 335
Gln Ala Ser Glu Ala Gln Gln Arg Ala Gln Ala Ala Leu Asp Lys Ala		
	340	345 350
Asn Ala Ser Arg Gly Gln Val Glu Gln Ala Asn Gln Glu Leu Gln Glu		
	355	360 365
Leu Ile Gln Ser Val Lys Asp Phe Leu Asn Gln Glu Gly Ala Asp Pro		
370	375	380
Asp Ser Ile Glu Met Val Ala Thr Arg Val Leu Glu Leu Ser Ile Pro		
385	390	395 400
Ala Ser Ala Glu Gln Ile Gln His Leu Ala Gly Ala Ile Ala Glu Arg		
	405	410 415
Val Arg Ser Leu Ala Asp Val Asp Ala Ile Leu Ala Arg Thr Val Gly		
	420	425 430
Asp Val Arg Arg Ala Glu Gln Leu Leu Gln Asp Ala Arg Arg Ala Arg		
	435	440 445
Ser Trp Ala Glu Asp Glu Lys Gln Lys Ala Glu Thr Val Gln Ala Ala		
450	455	460
Leu Glu Glu Ala Gln Arg Ala Gln Gly Ile Ala Gln Gly Ala Ile Arg		
465	470	475 480
Gly Ala Val Ala Asp Thr Arg Asp Thr Glu Gln Thr Leu Tyr Gln Val		
	485	490 495
Gln Glu Arg Met Ala Gly Ala Glu Arg Ala Leu Ser Ser Ala Gly Glu		
	500	505 510
Arg Ala Arg Gln Leu Asp Ala Leu Leu Glu Ala Leu Lys Leu Lys Arg		
	515	520 525
Ala Gly Asn Ser Leu Ala Ala Ser Thr Ala Glu Glu Thr Ala Gly Ser		
530	535	540
Ala Gln Gly Arg Ala Gln Glu Ala Glu Gln Leu Leu Arg Gly Pro Leu		
545	550	555 560
Gly Asp Gln Tyr Gln Thr Val Lys Ala Leu Ala Glu Arg Lys Ala Gln		

636

565

570

575

Gly Val Leu Ala Ala Gln Ala Arg Ala Glu Gln Leu Arg Asp Glu Ala  
580 585 590

Arg Asp Leu Leu Gln Ala Ala Gln Asp Lys Leu Gln Arg Leu Gln Glu  
595 600 605

Leu Glu Gly Thr Tyr Glu Glu Asn Glu Arg Ala Leu Glu Ser Lys Ala  
610 615 620

Ala Gln Leu Asp Gly Leu Glu Ala Arg Met Arg Ser Val Leu Gln Ala  
625 630 635 640

Ile Asn Leu Gln Val Gln Ile Tyr Asn Thr Cys Gln  
645 650

<210> 668

<211> 406

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 668

Gly Ala Val Arg Ser Ser Cys Ala Glu Leu Gln Ala Arg Val Met Ala  
1 5 10 15

Ala Leu Arg Gln Pro Gln Val Ala Glu Cys Trp Pro Arg Pro Gly Glu  
20 25 30

Pro Ser Gly Arg Ser Ser Gly Pro Ser Pro Ser Trp Pro Cys Gln Arg  
35 40 45

Arg Ala Ala Cys Asn Leu Ile Gly Glu His Thr Asp Tyr Asn Gln Gly  
50 55 60

Leu Val Leu Pro Met Ala Leu Glu Leu Met Thr Val Leu Val Gly Ser  
65 70 75 80

Pro Arg Lys Xaa Gly Leu Val Ser Leu Leu Thr Thr Ser Glu Gly Ala  
85 90 95

Asp Glu Pro Gln Arg Leu Gln Phe Pro Leu Pro Thr Ala Gln Arg Ser  
100 105 110



Leu Glu Pro Gly Thr Pro Arg Trp Ala Asn Tyr Val Lys Gly Val Ile  
 115 120 125  
 Gln Tyr Tyr Pro Ala Ala Pro Leu Pro Gly Phe Ser Ala Val Val Val  
 130 135 140  
 Ser Ser Val Pro Leu Gly Gly Gly Leu Ser Ser Ser Ala Ser Leu Glu  
 145 150 155 160  
 Val Ala Thr Tyr Thr Phe Leu Gln Gln Leu Cys Pro Asp Ser Gly Thr  
 165 170 175  
 Ile Ala Ala Arg Ala Gln Val Cys Gln Gln Ala Glu His Ser Phe Ala  
 180 185 190  
 Gly Met Pro Cys Gly Ile Met Asp Gln Phe Ile Ser Leu Met Gly Gln  
 195 200 205  
 Lys Gly His Ala Leu Leu Ile Asp Cys Arg Ser Leu Glu Thr Ser Leu  
 210 215 220  
 Val Pro Leu Ser Asp Pro Lys Leu Ala Val Leu Ile Thr Asn Ser Asn  
 225 230 235 240  
 Val Arg His Ser Leu Ala Ser Ser Glu Tyr Pro Val Arg Arg Arg Gln  
 245 250 255  
 Cys Glu Glu Val Ala Arg Ala Leu Gly Lys Glu Ser Leu Arg Glu Val  
 260 265 270  
 Gln Leu Glu Glu Leu Glu Ala Ala Arg Asp Leu Val Ser Lys Glu Gly  
 275 280 285  
 Phe Arg Arg Ala Arg His Val Val Gly Glu Ile Arg Arg Thr Ala Gln  
 290 295 300  
 Ala Ala Ala Ala Leu Arg Arg Gly Asp Tyr Arg Ala Phe Gly Arg Leu  
 305 310 315 320  
 Met Val Glu Ser His Arg Ser Leu Arg Asp Asp Tyr Glu Val Ser Cys  
 325 330 335  
 Pro Glu Leu Asp Gln Leu Val Glu Ala Ala Leu Ala Val Pro Gly Val  
 340 345 350  
 Tyr Gly Ser Arg Met Thr Gly Gly Gly Phe Gly Gly Cys Thr Val Thr  
 355 360 365  
 Leu Leu Glu Ala Ser Ala Ala Pro His Ala Met Arg His Ile Gln Glu  
 370 375 380

638

His Tyr Gly Gly Thr Ala Thr Phe Tyr Leu Ser Gln Ala Ala Asp Gly  
 385 390 395 400

Ala Lys Val Leu Cys Leu  
 405

&lt;210&gt; 669

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 669

Pro Glu Pro Thr Val Val Met Ala Ala Arg Ala Leu Cys Met Leu Gly  
 1 5 10 15

Leu Val Leu Ala Leu Leu Ser Ser Ser Ser Ala Glu Glu Tyr Val Gly  
 20 25 30

Leu Ser Ala Asn Gln Cys Ala Val Pro Ala Lys Asp Arg Val Asp Cys  
 35 40 45

Gly Tyr Pro His Val Thr Pro Lys Glu Cys Asn Asn Arg Gly Cys Cys  
 50 55 60

Phe Asp Ser Arg Ile Pro Gly Val Pro Trp Cys Phe Lys Pro Leu Gln  
 65 70 75 80

Glu Ala Glu Cys Thr Phe  
 85

&lt;210&gt; 670

&lt;211&gt; 392

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 670

Gly Gly Gly Ala Arg Xaa Ser Pro Ala Thr Gln Pro Pro Pro Leu Leu  
 1 5 10 15

Pro Pro Ser Ala Thr Gly Pro Asp Ala Thr Val Gly Gly Pro Ala Pro  
 20 25 30

Thr Pro Leu Leu Pro Pro Ser Ala Thr Ala Ser Val Lys Met Glu Pro  
 35 40 45  
 Glu Asn Lys Tyr Leu Pro Glu Leu Met Ala Glu Lys Asp Ser Leu Asp  
 50 55 60  
 Pro Ser Phe Thr His Ala Met Gln Leu Leu Thr Ala Glu Ile Glu Lys  
 65 70 75 80  
 Ile Gln Lys Gly Asp Ser Lys Lys Asp Asp Glu Glu Asn Tyr Leu Asp  
 85 90 95  
 Leu Phe Ser His Lys Asn Met Lys Leu Lys Glu Arg Val Leu Ile Pro  
 100 105 110  
 Val Lys Gln Tyr Pro Lys Phe Asn Phe Val Gly Lys Ile Leu Gly Pro  
 115 120 125  
 Gln Gly Asn Thr Ile Lys Arg Leu Gln Glu Glu Thr Gly Ala Lys Ile  
 130 135 140  
 Ser Val Leu Gly Lys Gly Ser Met Arg Asp Lys Ala Lys Glu Glu Glu  
 145 150 155 160  
 Leu Arg Lys Gly Gly Asp Pro Lys Tyr Ala His Leu Asn Met Asp Leu  
 165 170 175  
 His Val Phe Ile Glu Val Phe Gly Pro Pro Cys Glu Ala Tyr Ala Leu  
 180 185 190  
 Met Ala His Ala Met Glu Glu Val Lys Lys Phe Leu Val Pro Asp Met  
 195 200 205  
 Met Asp Asp Ile Cys Gln Glu Gln Phe Leu Glu Leu Ser Tyr Leu Asn  
 210 215 220  
 Gly Val Pro Glu Pro Ser Arg Gly Arg Gly Val Pro Val Arg Gly Arg  
 225 230 235 240  
 Gly Ala Ala Pro Pro Pro Pro Val Pro Arg Gly Arg Gly Val Gly  
 245 250 255  
 Pro Pro Arg Gly Ala Leu Val Arg Gly Thr Pro Val Arg Gly Ala Ile  
 260 265 270  
 Thr Arg Gly Ala Thr Val Thr Arg Gly Val Pro Pro Pro Pro Thr Val  
 275 280 285  
 Arg Gly Ala Pro Ala Pro Arg Ala Arg Thr Ala Gly Ile Gln Arg Ile  
 290 295 300

640

Pro Leu Pro Pro Pro Pro Ala Pro Glu Thr Tyr Glu Glu Tyr Gly Tyr  
 305 310 315 320  
 Asp Asp Thr Tyr Ala Glu Gln Ser Tyr Glu Gly Tyr Glu Gly Tyr Tyr  
 325 330 335  
 Ser Gln Ser Gln Gly Asp Ser Glu Tyr Tyr Asp Tyr Gly His Gly Glu  
 340 345 350  
 Val Gln Asp Ser Tyr Glu Ala Tyr Gly Gln Asp Asp Trp Asn Gly Thr  
 355 360 365  
 Arg Pro Ser Leu Lys Ala Pro Pro Ala Arg Pro Val Lys Gly Ala Tyr  
 370 375 380  
 Arg Glu His Pro Tyr Gly Arg Tyr  
 385 390

<210> 671  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 671  
 Arg Asn Met Ser Ser Phe Ser Arg Ala Pro Gln Gln Trp Ala Thr Phe  
 1 5 10 15  
 Ala Arg Ile Trp Tyr Leu Leu Asp Gly Lys Met Gln Pro Pro Gly Lys  
 20 25 30  
 Leu Ala Ala Met Ala Ser Ile Arg Leu Gln Gly Leu His Lys Pro Val  
 35 40 45  
 Tyr His Ala Leu Ser Asp Cys Gly Asp His Val Val Ile Met Asn Thr  
 50 55 60  
 Arg His Ile Ala Phe Ser Gly Asn Lys Trp Glu Gln Lys Val Tyr Ser  
 65 70 75 80  
 Ser His Thr Gly Tyr Pro Gly Gly Phe Arg Gln Val Thr Ala Ala Gln  
 85 90 95  
 Leu His Leu Arg Asp Pro Val Ala Ile Val Lys Leu Ala Ile Tyr Gly  
 100 105 110  
 Met Leu Pro Lys Asn Leu His Arg Arg Thr Met Met Glu Arg Leu His  
 115 120 125  
 Leu Phe Pro Asp Glu Tyr Ile Pro Glu Asp Ile Leu Lys Asn Leu Val

641

130                      135                      140  
 Glu Glu Leu Pro Gln Pro Arg Lys Ile Pro Lys Arg Leu Asp Glu Tyr  
 145                      150                      155                      160  
 Thr Gln Glu Glu Ile Asp Ala Phe Pro Arg Leu Trp Thr Pro Pro Glu  
                     165                      170                      175  
 Asp Tyr Arg Leu  
                     180

<210> 672  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 672  
 Glu Asn Tyr Gln Phe Thr Tyr Arg Arg Phe Phe Phe Pro Asn Ser Arg  
   1                      5                      10                      15  
 Phe His Pro Arg Pro Phe Glu Glu Leu Gln Thr Leu Ser Leu Arg Lys  
                     20                      25                      30  
 Glu Arg Gly Gln Pro Lys Ile Asn Ala Lys Phe Ala Tyr Thr Pro Ser  
                     35                      40                      45  
 His Ser Asp Val Leu Val Val Thr Tyr Tyr Gln Cys Gly Arg Glu Pro  
   50                      55                      60  
 Lys Leu His Phe Arg Ser Lys Tyr Ser Leu Cys Arg Tyr Cys  
   65                      70                      75

<210> 673  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids

642

&lt;400&gt; 673

Pro Thr Arg Pro Pro Leu Cys Arg Gly Ala Ala Ser Arg Gly Leu Leu  
 1 5 10 15  
 Cys Lys Trp Ala Pro Trp Pro Ser Ala Pro Val Pro Ala Thr Arg Asp  
 20 25 30  
 Arg Ala Pro Arg Pro Ala Arg Gly Arg Arg Pro Gly Arg Leu Gly Ser  
 35 40 45  
 Thr Ser Ser Asn Ser Ser Cys Ser Ser Thr Glu Cys Pro Gly Glu Ala  
 50 55 60  
 Ile Pro His Pro Pro Gly Leu Pro Lys Ala Asp Pro Gly His Trp Trp  
 65 70 75 80  
 Ala Ser Phe Phe Phe Gly Lys Ser Thr Leu Pro Phe Met Ala Thr Val  
 85 90 95  
 Leu Glu Ser Ala Glu His Ser Glu Pro Pro Gln Ala Ser Ser Ser Met  
 100 105 110  
 Xaa Ala Cys Gly Leu Ala Arg Glu Ala Pro Arg Lys Gln Pro Gly Gly  
 115 120 125  
 Gln Ser Ser Xaa Ala Ser Ala Gly Pro Pro Ser  
 130 135

&lt;210&gt; 674

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (193)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 674

643

Glu Arg Ala His Ser Leu Xaa His Gly Val Asp Gly Glu Pro Cys Pro  
 1 5 10 15  
 Glu Asp Tyr Lys Tyr Ile Ser Glu Asn Cys Glu Thr Ser Thr Met Asn  
 20 25 30  
 Ile Asp Arg Asn Ile Thr His Leu Gln His Cys Thr Phe Val Asp Asp  
 35 40 45  
 Cys Ser Ser Ser Asn Cys Leu Cys Gly Xaa Phe Ser Ile Arg Cys Trp  
 50 55 60  
 Tyr Asp Lys Asp Gly Arg Leu Leu Gln Glu Phe Asn Lys Ile Glu Pro  
 65 70 75 80  
 Pro Leu Ile Phe Glu Cys Asn Gln Ala Cys Ser Cys Trp Arg Asn Cys  
 85 90 95  
 Lys Asn Arg Val Val Gln Ser Gly Ile Lys Val Arg Leu Gln Leu Tyr  
 100 105 110  
 Arg Thr Ala Lys Met Gly Trp Gly Val Arg Ala Leu Gln Thr Ile Pro  
 115 120 125  
 Gln Gly Thr Phe Ile Cys Glu Tyr Val Gly Glu Leu Ile Ser Asp Ala  
 130 135 140  
 Glu Ala Asp Val Arg Glu Asp Asp Ser Tyr Leu Phe Asp Leu Asp Asn  
 145 150 155 160  
 Lys Asp Gly Glu Val Tyr Cys Ile Asp Ala Arg Tyr Tyr Gly Asn Ile  
 165 170 175  
 Ser Arg Phe Ile Asn His Leu Cys Asp Pro Asn Ile Ile Pro Val Arg  
 180 185 190  
 Xaa Phe Met Leu His Gln Asp Leu Arg Phe Pro Arg Ile Ala Phe Phe  
 195 200 205  
 Ser Ser Arg Asp Ile Arg Thr Gly Glu Glu Leu Gly Phe Asp Tyr Gly  
 210 215 220  
 Asp Arg Phe Trp Asp Ile Lys Ser Lys Tyr Phe Thr Cys Gln Cys Gly  
 225 230 235 240  
 Ser Glu Lys Cys Lys His Ser Ala Glu Ala Ile Ala Leu Glu Gln Ser  
 245 250 255  
 Arg Leu Ala Arg Leu Asp Pro His Pro Glu Leu Leu Pro Glu Leu Gly  
 260 265 270

644

Ser Leu Pro Pro Val Asn Thr  
275

<210> 675  
<211> 405  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (393)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (394)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 675  
Arg Asn Thr Leu Gly Arg Gly Thr Thr Ile Thr Leu Val Leu Lys Glu  
1 5 10 15  
Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val Lys  
20 25 30  
Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser Lys  
35 40 45  
Thr Glu Thr Val Glu Glu Pro Met Glu Glu Glu Glu Ala Ala Lys Glu  
50 55 60  
Glu Lys Glu Glu Ser Asp Asp Glu Ala Ala Val Glu Glu Glu Glu Glu  
65 70 75 80  
Glu Lys Lys Pro Lys Thr Lys Lys Val Glu Lys Thr Val Trp Asp Trp  
85 90 95  
Glu Leu Met Asn Asp Ile Lys Pro Ile Trp Gln Arg Pro Ser Lys Glu  
100 105 110  
Val Glu Glu Asp Glu Tyr Lys Ala Phe Tyr Lys Ser Phe Ser Lys Glu  
115 120 125  
Ser Asp Asp Pro Met Ala Tyr Ile His Phe Thr Ala Glu Gly Glu Val  
130 135 140  
Thr Phe Lys Ser Ile Leu Phe Val Pro Thr Ser Ala Pro Arg Gly Leu  
145 150 155 160



645

Phe Asp Glu Tyr Gly Ser Lys Lys Ser Asp Tyr Ile Lys Leu Tyr Val  
 165 170 175  
 Arg Arg Val Phe Ile Thr Asp Asp Phe His Asp Met Met Pro Lys Tyr  
 180 185 190  
 Leu Asn Phe Val Lys Gly Val Val Asp Ser Asp Asp Leu Pro Leu Asn  
 195 200 205  
 Val Ser Arg Glu Thr Leu Gln Gln His Lys Leu Leu Lys Val Ile Arg  
 210 215 220  
 Lys Lys Leu Val Arg Lys Thr Leu Asp Met Ile Lys Lys Ile Ala Asp  
 225 230 235 240  
 Asp Lys Tyr Asn Asp Thr Phe Trp Lys Glu Phe Gly Thr Asn Ile Lys  
 245 250 255  
 Leu Gly Val Ile Glu Asp His Ser Asn Arg Thr Arg Leu Ala Lys Leu  
 260 265 270  
 Leu Arg Phe Gln Ser Ser His His Pro Thr Asp Ile Thr Ser Leu Asp  
 275 280 285  
 Gln Tyr Val Glu Arg Met Lys Glu Lys Gln Asp Lys Ile Tyr Phe Met  
 290 295 300  
 Ala Gly Ser Ser Arg Lys Glu Ala Glu Ser Ser Pro Phe Val Glu Arg  
 305 310 315 320  
 Leu Leu Lys Lys Gly Tyr Glu Val Ile Tyr Leu Thr Glu Pro Val Asp  
 325 330 335  
 Glu Tyr Cys Ile Gln Ala Leu Pro Glu Phe Asp Gly Lys Arg Phe Gln  
 340 345 350  
 Asn Val Ala Lys Glu Gly Val Lys Phe Asp Glu Ser Glu Lys Thr Lys  
 355 360 365  
 Glu Ser Arg Glu Ala Val Glu Lys Glu Phe Glu Pro Leu Leu Asn Trp  
 370 375 380  
 Met Lys Asp Lys Ala Leu Lys Gly Xaa Xaa Leu Trp Glu Ile Leu Pro  
 385 390 395 400  
 Ile Cys Gly Lys Tyr  
 405

&lt;210&gt; 676

646

<211> 465  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (16)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 676  
 Asn Asp Ser Leu Xaa Xaa Lys Ala Gly Thr Pro Ala Gly Asn Arg Xaa  
   1                  5                  10                  15  
 Gly Ile Pro Gly Ser Thr His Ala Ser Ala Ala Ala Pro Phe Ala Ala  
                   20                  25                  30  
 Ala Leu Ala Arg Asp Pro Asn Pro Ala Ser Pro Leu Pro Glu His Arg  
           35                  40                  45  
 Pro Arg Leu His Arg Gly Pro Gly Pro Pro Ala Arg Leu Ala Ala Ala  
   50                  55                  60  
 Met Ala Asp Pro Lys Tyr Ala Asp Leu Pro Gly Ile Ala Arg Asn Glu  
   65                  70                  75                  80  
 Pro Asp Val Tyr Glu Thr Ser Asp Leu Pro Glu Asp Asp Gln Ala Glu  
                   85                  90                  95  
 Phe Asp Ala Glu Glu Leu Thr Ser Thr Ser Val Glu His Ile Ile Val  
           100                  105                  110  
 Asn Pro Asn Ala Ala Tyr Asp Lys Phe Lys Asp Lys Arg Val Gly Thr  
   115                  120                  125  
 Lys Gly Leu Asp Phe Ser Asp Arg Ile Gly Lys Thr Lys Arg Thr Gly  
   130                  135                  140  
 Tyr Glu Ser Gly Glu Tyr Glu Met Leu Gly Glu Gly Leu Gly Val Lys  
   145                  150                  155                  160  
 Glu Thr Pro Gln Gln Lys Tyr Gln Arg Leu Leu His Glu Val Gln Glu

647

165	170	175
Leu Thr Thr Glu Val Glu Lys Ile Lys Thr Thr Val Lys Glu Ser Ala		
180	185	190
Thr Glu Glu Lys Leu Thr Pro Val Leu Leu Ala Lys Gln Leu Ala Ala		
195	200	205
Leu Lys Gln Gln Leu Val Ala Ser His Leu Glu Lys Leu Leu Gly Pro		
210	215	220
Asp Ala Ala Ile Asn Leu Thr Asp Pro Asp Gly Ala Leu Ala Lys Arg		
225	230	235
Leu Leu Leu Gln Leu Glu Ala Thr Lys Asn Ser Lys Gly Gly Ser Gly		
245	250	255
Gly Lys Thr Thr Gly Thr Pro Pro Asp Ser Ser Leu Val Thr Tyr Glu		
260	265	270
Leu His Ser Arg Pro Glu Gln Asp Lys Phe Ser Gln Ala Ala Lys Val		
275	280	285
Ala Glu Leu Glu Lys Arg Leu Thr Glu Leu Glu Thr Ala Val Arg Cys		
290	295	300
Asp Gln Asp Ala Gln Asn Pro Leu Ser Ala Gly Leu Gln Gly Ala Cys		
305	310	315
Leu Met Glu Thr Val Glu Leu Leu Gln Ala Lys Val Ser Ala Leu Asp		
325	330	335
Leu Ala Val Leu Asp Gln Val Glu Ala Arg Leu Gln Ser Val Leu Gly		
340	345	350
Lys Val Asn Glu Ile Ala Lys His Lys Ala Ser Val Glu Asp Ala Asp		
355	360	365
Thr Gln Ser Lys Val His Gln Leu Tyr Glu Thr Ile Gln Arg Trp Ser		
370	375	380
Pro Ile Ala Ser Thr Leu Pro Glu Leu Val Gln Arg Leu Val Thr Ile		
385	390	395
Lys Gln Leu His Glu Gln Ala Met Gln Phe Gly Gln Leu Leu Thr His		
405	410	415
Leu Asp Thr Thr Gln Gln Met Ile Ala Asn Ser Leu Lys Asp Asn Thr		
420	425	430
Thr Leu Leu Thr Gln Val Gln Thr Thr Met Arg Glu Asn Leu Ala Thr		

648

435 440 445  
 Val Glu Gly Asn Phe Ala Ser Ile Asp Glu Arg Met Lys Lys Leu Gly  
 450 455 460

Lys  
 465

<210> 677  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 677  
 Ser Ser Phe Leu Asn Ser Asp Leu Gly Leu Ser Leu Ala Arg Asn Leu  
 1 5 10 15  
 Ala Phe Ser Phe Thr Thr Lys Glu Arg Asp Gln Lys Pro Leu Ile Phe  
 20 25 30  
 Asn Phe His Lys Met Leu Glu Val Tyr Ile Tyr Ile Tyr Ile Phe Leu  
 35 40 45

<210> 678  
 <211> 940  
 <212> PRT  
 <213> Homo sapiens

<400> 678  
 Val Leu Gly Glu Gly Ile Ser Phe Leu Leu Ser Pro Pro Leu Pro Thr  
 1 5 10 15  
 Pro Ser Ile Asn Ile Ile Leu Leu Lys Ile Leu Arg Cys Gln Ala Ala  
 20 25 30  
 Lys Val Glu Ser Ala Ile Ala Glu Gly Gly Ala Ser Arg Phe Ser Ala  
 35 40 45  
 Ser Ser Gly Gly Gly Gly Ser Arg Gly Ala Pro Gln His Tyr Pro Lys  
 50 55 60  
 Thr Ala Gly Asn Ser Glu Phe Leu Gly Lys Thr Pro Gly Gln Asn Ala  
 65 70 75 80

Gln Lys Trp Ile Pro Ala Arg Ser Thr Arg Arg Asp Asp Asn Ser Ala  
 85 90 95  
 Ala Asn Asn Ser Ala Asn Glu Lys Glu Arg His Asp Ala Ile Phe Arg  
 100 105 110  
 Lys Val Arg Gly Ile Leu Asn Lys Leu Thr Pro Glu Lys Phe Asp Lys  
 115 120 125  
 Leu Cys Leu Glu Leu Leu Asn Val Gly Val Glu Ser Lys Leu Ile Leu  
 130 135 140  
 Lys Gly Val Ile Leu Leu Ile Val Asp Lys Ala Leu Glu Glu Pro Lys  
 145 150 155 160  
 Tyr Ser Ser Leu Tyr Ala Gln Leu Cys Leu Arg Leu Ala Glu Asp Ala  
 165 170 175  
 Pro Asn Phe Asp Gly Pro Ala Ala Glu Gly Gln Pro Gly Gln Lys Gln  
 180 185 190  
 Ser Thr Thr Phe Arg Arg Leu Leu Ile Ser Lys Leu Gln Asp Glu Phe  
 195 200 205  
 Glu Asn Arg Thr Arg Asn Val Asp Val Tyr Asp Lys Arg Glu Asn Pro  
 210 215 220  
 Leu Leu Pro Glu Glu Glu Glu Gln Arg Ala Ile Ala Lys Ile Lys Met  
 225 230 235 240  
 Leu Gly Asn Ile Lys Phe Ile Gly Glu Leu Gly Lys Leu Asp Leu Ile  
 245 250 255  
 His Glu Ser Ile Leu His Lys Cys Ile Lys Thr Leu Leu Glu Lys Lys  
 260 265 270  
 Lys Arg Val Gln Leu Lys Asp Met Gly Glu Asp Leu Glu Cys Leu Cys  
 275 280 285  
 Gln Ile Met Arg Thr Val Gly Pro Arg Leu Asp His Glu Arg Ala Lys  
 290 295 300  
 Ser Leu Met Asp Gln Tyr Phe Ala Arg Met Cys Ser Leu Met Leu Ser  
 305 310 315 320  
 Lys Glu Leu Pro Ala Arg Ile Arg Phe Leu Leu Gln Asp Thr Val Glu  
 325 330 335  
 Leu Arg Glu His His Trp Val Pro Arg Lys Ala Phe Leu Asp Asn Gly  
 340 345 350

650

Pro Lys Thr Ile Asn Gln Ile Arg Gln Asp Ala Val Lys Asp Leu Gly  
 355 360 365  
 Val Phe Ile Pro Ala Pro Met Ala Gln Gly Met Arg Ser Asp Phe Phe  
 370 375 380  
 Leu Glu Gly Pro Phe Met Pro Pro Arg Met Lys Met Asp Arg Asp Pro  
 385 390 395 400  
 Leu Gly Gly Leu Ala Asp Met Phe Gly Gln Met Pro Gly Ser Gly Ile  
 405 410 415  
 Gly Thr Gly Pro Gly Val Ile Gln Asp Arg Phe Ser Pro Thr Met Gly  
 420 425 430  
 Arg His Arg Ser Asn Gln Leu Phe Asn Gly His Gly Gly His Ile Met  
 435 440 445  
 Pro Pro Thr Gln Ser Gln Phe Gly Glu Met Gly Gly Lys Phe Met Lys  
 450 455 460  
 Ser Gln Gly Leu Ser Gln Leu Tyr His Asn Gln Ser Gln Gly Leu Leu  
 465 470 475 480  
 Ser Gln Leu Gln Gly Gln Ser Lys Asp Met Pro Pro Arg Phe Ser Lys  
 485 490 495  
 Lys Gly Gln Leu Asn Ala Asp Glu Ile Ser Leu Arg Pro Ala Gln Ser  
 500 505 510  
 Phe Leu Met Asn Lys Asn Gln Val Pro Lys Leu Gln Pro Gln Ile Thr  
 515 520 525  
 Met Ile Pro Pro Ser Ala Gln Pro Pro Arg Thr Gln Thr Pro Pro Leu  
 530 535 540  
 Gly Gln Thr Pro Gln Leu Gly Leu Lys Thr Asn Pro Pro Leu Ile Gln  
 545 550 555 560  
 Glu Lys Pro Ala Lys Thr Ser Lys Lys Pro Pro Pro Ser Lys Glu Glu  
 565 570 575  
 Leu Leu Lys Leu Thr Glu Thr Val Val Thr Glu Tyr Leu Asn Ser Gly  
 580 585 590  
 Asn Ala Asn Glu Ala Val Asn Gly Val Arg Glu Met Arg Ala Pro Lys  
 595 600 605  
 His Phe Leu Pro Glu Met Leu Ser Lys Val Ile Ile Leu Ser Leu Asp  
 610 615 620

651

Arg Ser Asp Glu Asp Lys Glu Lys Ala Ser Ser Leu Ile Ser Leu Leu  
 625 630 635 640  
 Lys Gln Glu Gly Ile Ala Thr Ser Asp Asn Phe Met Gln Ala Phe Leu  
 645 650 655  
 Asn Val Leu Asp Gln Cys Pro Lys Leu Glu Val Asp Ile Pro Leu Val  
 660 665 670  
 Lys Ser Tyr Leu Ala Gln Phe Ala Ala Arg Ala Ile Ile Ser Glu Leu  
 675 680 685  
 Val Ser Ile Ser Glu Leu Ala Gln Pro Leu Glu Ser Gly Thr His Phe  
 690 695 700  
 Pro Leu Phe Leu Leu Cys Leu Gln Gln Leu Ala Lys Leu Gln Asp Arg  
 705 710 715 720  
 Glu Trp Leu Thr Glu Leu Phe Gln Gln Ser Lys Val Asn Met Gln Lys  
 725 730 735  
 Met Leu Pro Glu Ile Asp Gln Asn Lys Asp Arg Met Leu Glu Ile Leu  
 740 745 750  
 Glu Gly Lys Gly Leu Ser Phe Leu Phe Pro Leu Leu Lys Leu Glu Lys  
 755 760 765  
 Glu Leu Leu Lys Gln Ile Lys Leu Asp Pro Ser Pro Gln Thr Ile Tyr  
 770 775 780  
 Lys Trp Ile Lys Asp Asn Ile Ser Pro Lys Leu His Val Asp Lys Gly  
 785 790 795 800  
 Phe Val Asn Ile Leu Met Thr Ser Phe Leu Gln Tyr Ile Ser Ser Glu  
 805 810 815  
 Val Asn Pro Pro Ser Asp Glu Thr Asp Ser Ser Ser Ala Pro Ser Lys  
 820 825 830  
 Glu Gln Leu Glu Gln Glu Lys Gln Leu Leu Leu Ser Phe Lys Pro Val  
 835 840 845  
 Met Gln Lys Phe Leu His Asp His Val Asp Leu Gln Val Ser Ala Leu  
 850 855 860  
 Tyr Ala Leu Gln Val His Cys Tyr Asn Ser Asn Phe Pro Lys Gly Met  
 865 870 875 880  
 Leu Leu Arg Phe Phe Val His Phe Tyr Asp Met Glu Ile Ile Glu Glu  
 885 890 895

652

Glu Ala Phe Leu Ala Trp Lys Glu Asp Ile Thr Gln Glu Phe Pro Gly  
                   900                                  905                                  910

Lys Gly Lys Ala Leu Phe Gln Val Asn Gln Trp Leu Thr Trp Leu Glu  
                   915                                  920                                  925

Thr Ala Glu Glu Glu Glu Ser Glu Glu Glu Ala Asp  
                   930                                  935                                  940

<210> 679

<211> 212

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (172)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 679

Ser Trp Lys Glu Glu Glu Xaa Lys Pro His Leu Gln Gly Lys Pro Gly  
   1                                  5                                  10                                  15

Arg Pro Leu Ser Pro Ala Asn Val Pro Ala Leu Pro Gly Glu Thr Val  
                   20                                  25                                  30

Thr Ser Pro Val Arg Leu His Pro Asp Tyr Leu Ser Pro Glu Glu Ile  
                   35                                  40                                  45

Gln Arg Gln Leu Gln Asp Ile Glu Arg Arg Leu Asp Ala Leu Glu Leu  
                   50                                  55                                  60

Arg Gly Val Glu Leu Glu Lys Arg Leu Arg Ala Ala Glu Gly Asp Asp  
   65                                  70                                  75                                  80

Ala Glu Asp Ser Leu Met Val Asp Trp Phe Trp Leu Ile His Glu Lys  
                   85                                  90                                  95

Gln Leu Leu Leu Arg Gln Glu Ser Glu Leu Met Tyr Lys Ser Lys Ala



653

100	105	110
Gln Arg Leu Glu Glu Gln Gln Leu Asp Ile Glu Gly Glu Leu Arg Arg		
115	120	125
Leu Met Ala Lys Pro Glu Ala Leu Lys Ser Leu Gln Glu Arg Arg Arg		
130	135	140
Glu Gln Glu Leu Leu Glu Gln Tyr Val Ser Thr Val Asn Asp Arg Xaa		
145	150	155
160		
Asp Ile Val Asp Ser Leu Asp Glu Asp Arg Leu Xaa Glu Gln Glu Glu		
165	170	175
Asp Gln Met Leu Arg Asp Met Ile Glu Lys Leu Gly Leu Gln Arg Lys		
180	185	190
Lys Ser Lys Phe Arg Leu Ser Lys Ile Trp Ser Pro Lys Ser Lys Ser		
195	200	205
Ser Pro Ser Gln		
210		

&lt;210&gt; 680

&lt;211&gt; 412

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (172)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (404)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 680

Val Ala Val Glu Leu Gly Ser Leu Arg Gly Gly Thr Met Ala Ser Glu
1                      5                      10                      15

Lys Pro Leu Ala Ala Val Thr Cys Thr Ala Pro Val Asn Ile Ala Val
20                      25                      30

Ile Lys Tyr Trp Gly Lys Arg Asp Glu Glu Leu Val Leu Pro Ile Asn
35                      40                      45

Ser Ser Leu Ser Val Thr Leu His Gln Asp Gln Leu Lys Thr Thr Thr
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654

50	55	60
Thr Ala Val Ile Ser Lys Asp Phe Thr Glu Asp Arg Ile Trp Leu Asn		
65	70	75 80
Gly Arg Glu Glu Asp Val Gly Gln Pro Arg Leu Gln Ala Cys Leu Arg		
	85	90 95
Glu Ile Arg Cys Leu Ala Arg Lys Arg Arg Asn Ser Arg Asp Gly Asp		
	100	105 110
Pro Leu Pro Ser Ser Leu Ser Cys Lys Val His Val Ala Ser Val Asn		
	115	120 125
Asn Phe Pro Thr Ala Ala Gly Leu Ala Ser Ser Ala Ala Gly Tyr Ala		
	130	135 140
Cys Leu Ala Tyr Thr Leu Ala Arg Val Tyr Gly Val Glu Ser Asp Leu		
	145	150 155 160
Ser Glu Val Ala Arg Arg Gly Ser Gly Ser Ala Xaa Arg Ser Leu Tyr		
	165	170 175
Gly Gly Phe Val Glu Trp Gln Met Gly Glu Gln Ala Asp Gly Lys Asp		
	180	185 190
Ser Ile Ala Arg Gln Val Ala Pro Glu Ser His Trp Pro Glu Leu Arg		
	195	200 205
Val Leu Ile Leu Val Val Ser Ala Glu Lys Lys Leu Thr Gly Ser Thr		
	210	215 220
Val Gly Met Arg Ala Ser Val Glu Thr Ser Pro Leu Leu Arg Phe Arg		
	225	230 235 240
Ala Glu Ser Val Val Pro Ala Arg Met Ala Glu Met Ala Arg Cys Ile		
	245	250 255
Arg Glu Arg Asp Phe Pro Ser Phe Ala Gln Leu Thr Met Lys Asp Ser		
	260	265 270
Asn Gln Phe His Ala Thr Cys Leu Asp Thr Phe Pro Pro Ile Ser Tyr		
	275	280 285
Leu Asn Ala Ile Ser Trp Arg Ile Ile His Leu Val His Arg Phe Asn		
	290	295 300
Ala His His Gly Asp Thr Lys Val Ala Tyr Thr Phe Asp Ala Gly Pro		
	305	310 315 320
Asn Ala Val Ile Phe Thr Leu Asp Asp Thr Val Ala Glu Phe Val Ala		

655

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<400> 681
Lys Lys Thr Arg His Leu Ser Lys Ile Leu Cys Gly Lys Met Thr Val
 1               5              10              15
Asn Lys Met Arg Val Ser Gly Pro Phe Val Leu Leu Ser Phe Phe Asp
      20              25              30
Tyr Lys Phe Leu Leu Thr His Thr Ile Met Ser Ala Asn Pro Leu Leu
      35              40              45
Pro Arg Glu Arg Asn Cys Ala Pro Ser Val Leu Leu Pro
      50              55              60

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<400> 682
Ser Ala Pro Pro Pro Pro Arg Arg Lys Thr Ala Pro Pro Ala His Arg
 1             5             10             15
Gln Arg Pro Pro Pro Gln Ser Pro Thr Ala Thr Gly Leu Gly Pro Ala
          20             25             30

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656

Ala Arg Ser Cys Leu Pro Gln Pro Pro Ser Arg Gly Pro Gln Pro Pro  
           35                          40                          45  
 Pro Thr Leu Pro His Gly Pro Gly Ala Met Ser Glu Leu Glu Gln Leu  
           50                          55                          60  
 Arg Gln Glu Ala Glu Gln Leu Arg Asn Gln Ile Arg Asp Ala Arg Lys  
           65                          70                          75                          80  
 Ala Cys Gly Asp Ser Thr Leu Thr Gln Ile Thr Ala Gly Leu Asp Pro  
                           85                          90                          95  
 Val Gly Arg Ile Gln Met Arg Thr Arg Arg Thr Leu Arg Gly His Leu  
                           100                          105                          110  
 Ala Lys Ile Tyr Ala Met His Trp Gly Thr Asp Ser Arg Leu Leu Val  
           115                          120                          125  
 Ser Ala Ser Gln Asp Gly Lys Leu Ile Ile Trp Asp Ser Tyr Thr Thr  
           130                          135                          140  
 Asn Lys Val His Ala Ile Pro Leu Arg Ser Ser Trp Val Met Thr Cys  
           145                          150                          155                          160  
 Ala Tyr Ala Pro Ser Gly Asn Phe Val Ala Cys Gly Gly Leu Asp Asn  
                           165                          170                          175  
 Ile Cys Ser Ile Tyr Ser Leu Lys Thr Arg Glu Ala Thr Ser Gly Ser  
           180                          185                          190  
 Ala Gly Ser Cys Leu Ala Thr Leu Gly Thr Cys Arg Val Ala Ala Ser  
           195                          200                          205  
 Trp Met Thr Thr Lys Ser Ser Pro Ala Leu Gly Ile Pro Pro Val Pro  
           210                          215                          220  
 Cys Gly Thr Leu Arg Gln Ala Ser Arg Gln Trp Val Leu Leu Asp Thr  
           225                          230                          235                          240  
 Val Gly Met

&lt;210&gt; 683

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

657

&lt;222&gt; (133)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 683

Asp Leu Glu Gly Asp Ala Gly Tyr Thr Gly Gly Leu Arg Gln Gly His  
 1 5 10 15

Ala Gly Gly Ala Gly Glu Leu Ala Arg Thr Leu Ala Leu Lys Pro Thr  
 20 25 30

Ser Leu Glu Leu Phe Arg Thr Lys Val Asn Ala Leu Thr Tyr Gly Glu  
 35 40 45

Val Leu Arg Leu Arg Gln Thr Glu Arg Leu His Gln Glu Gly Thr Leu  
 50 55 60

Ala Pro Pro Ile Leu Glu Leu Arg Glu Lys Leu Lys Pro Glu Leu Met  
 65 70 75 80

Gly Leu Ile Arg Gln Gln Arg Leu Leu Arg Leu Cys Glu Gly Thr Leu  
 85 90 95

Phe Arg Lys Ile Ser Ser Arg Arg Arg Gln Asp Lys Leu Trp Phe Cys  
 100 105 110

Cys Leu Ser Pro Asn His Lys Leu Leu Gln Tyr Gly Asp Met Glu Glu  
 115 120 125

Gly Ala Ser Ala Xaa Pro Trp Arg Val Cys Pro Ser Asn Ser Leu Trp  
 130 135 140

Pro Thr  
 145

&lt;210&gt; 684

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 684

Val Tyr Ser Cys Gly Phe Gln Val Gln Ser Trp Ser Pro Arg Trp Ile  
 1 5 10 15

Trp Val Thr Thr Lys Ser Lys Ile Gly Ala Pro Arg Ser Ser Phe Cys  
 20 25 30

Trp His Arg Leu Pro Ser Thr Ser Gln Leu His Leu Cys Pro Ala Glu  
 35 40 45

658

Gly Glu Ala Pro Ser Ala Gly Glu Ala Ala Pro Arg Ala Pro Thr Gly  
 50 55 60  
 Ser Glu Pro Lys Pro Gly Ala Leu Pro Trp Gly Pro Arg Ala Pro Asp  
 65 70 75 80  
 Ser Glu Gly Gly Gly Gly Ala Gly Ala Ala Asp Pro Ala Ala Asn Ala  
 85 90 95  
 Gly His Gly Ala Ser Ser Glu Ala Glu Cys Gly Cys Gln Arg Thr Leu  
 100 105 110  
 Arg Pro Met Pro Ser Thr Pro Gly Pro Gly Ala Ala Ala Val Arg Ala  
 115 120 125  
 Leu Gly Gln Leu Phe His Ile Ala Cys Phe Thr Cys His Gln Cys Ala  
 130 135 140  
 Gln Gln Leu Gln Gly Gln Gln Phe Tyr Ser Leu Glu Gly Ala Pro Tyr  
 145 150 155 160  
 Cys Glu Gly Cys Tyr Thr Asp Thr Leu Glu Lys Cys Asn Thr Cys Gly  
 165 170 175  
 Glu Pro Ile Thr Asp Arg Met Leu Arg Ala Thr Gly Lys Ala Tyr His  
 180 185 190  
 Pro His Cys Phe Thr Cys Val Val Cys Ala Arg Pro Leu Glu Gly Thr  
 195 200 205  
 Ser Phe Ile Val Asp Gln Ala Asn Arg Pro His Cys Val Pro Asp Tyr  
 210 215 220  
 His Lys Gln Tyr Ala Pro Arg Cys Ser Val Cys Ser Glu Pro Ile Met  
 225 230 235 240  
 Pro Glu Pro Gly Arg Asp Glu Thr Val Arg Val Val Ala Leu Asp Lys  
 245 250 255  
 Asn Phe His Met Lys Cys Tyr Lys Cys Glu Asp Cys Gly Lys Pro Leu  
 260 265 270  
 Ser Ile Glu Ala Asp Asp Asn Gly Cys Phe Pro Leu Asp Gly His Val  
 275 280 285  
 Leu Cys Arg Lys Cys His Thr Ala Arg Ala Gln Thr  
 290 295 300

&lt;210&gt; 685

659

<211> 130  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (61)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 685

Ile	Arg	His	Glu	Asp	Cys	Pro	Thr	Pro	Ser	Gln	Cys	Val	Val	Ala	Arg
1				5					10					15	
Thr	Leu	Gly	Lys	Gln	Gln	Thr	Val	Met	Ala	Ile	Ala	Thr	Lys	Ile	Ala
			20					25					30		
Leu	Gln	Met	Asn	Cys	Lys	Met	Gly	Gly	Glu	Leu	Trp	Arg	Val	Asp	Ile
		35					40					45			
Pro	Leu	Lys	Leu	Val	Met	Ile	Val	Gly	Ile	Asp	Cys	Xaa	His	Asp	Met
	50					55					60				
Thr	Ala	Gly	Arg	Arg	Ser	Ile	Ala	Gly	Phe	Val	Ala	Ser	Ile	Asn	Glu
65					70					75				80	
Gly	Met	Thr	Arg	Trp	Phe	Ser	Arg	Cys	Ile	Phe	Gln	Asp	Arg	Gly	Gln
			85						90					95	
Glu	Leu	Val	Asp	Gly	Leu	Lys	Val	Cys	Leu	Gln	Ala	Ala	Leu	Arg	Ala
		100						105						110	
Trp	Asn	Ser	Cys	Asn	Glu	Tyr	Met	Pro	Ser	Arg	Ile	Ile	Val	Tyr	Arg
	115						120						125		
Val	Ala														
	130														

<210> 686  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (84)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 686

Ile Tyr Gln Val Tyr Asn Ala Leu Gln Glu Lys Val Gln Ala Val Cys

660

1                    5                    10                    15  
 Ala Asp Val Glu Lys Ser Glu Arg Val Val Glu Ser Cys Gln Ala Glu  
                   20                    25                    30  
 Val Asn Lys Leu Arg Arg Gln Ile Thr Gln Arg Lys Asn Glu Lys Glu  
                   35                    40                    45  
 Gln Glu Arg Arg Leu Gln Gln Ala Val Leu Ser Arg Gln Met Pro Ser  
                   50                    55                    60  
 Glu Ser Leu Asp Pro Ala Phe Ser Pro Arg Met Pro Ser Ser Gly Phe  
                   65                    70                    75                    80  
 Ala Ala Glu Xaa Arg Ser Thr Leu Gly Asp Ala Glu Ala Ser Asp Pro  
                   85                    90                    95  
 Pro Pro Pro Tyr Ser Asp Phe His Pro Asn Asn Gln Glu Ser Thr Leu  
                   100                    105                    110  
 Ser His Ser Arg Met Glu Arg Ser Val Phe Met Pro Arg Pro Gln Ala  
                   115                    120                    125  
 Val Gly Ser Ser Asn Tyr Ala Ser Thr Ser Ala Gly Leu Lys Tyr Pro  
                   130                    135                    140  
 Gly Ser Gly Ala Asp Leu Pro Pro Pro Gln Arg Ala Ala Gly Asp Ser  
                   145                    150                    155                    160  
 Gly Glu Asp Ser Asp Asp Ser Asp Tyr Glu Asn Leu Ile Asp Pro Thr  
                   165                    170                    175  
 Glu Pro Ser Asn Ser Glu Tyr Ser His Ser Lys Asp Ser Arg Pro Met  
                   180                    185                    190  
 Ala His Pro Asp Glu Asp Pro Arg Asn Thr Gln Thr Ser Gln Ile  
                   195                    200                    205

&lt;210&gt; 687

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 687

Ala Arg Ala Gly Glu Glu Gly Val Val Thr Arg Trp Arg His Arg Leu  
 1                    5                    10                    15  
 Gly Gln Gly Ala Cys Pro Trp Asp Arg Ser Arg Pro Met Glu Pro Pro  
                   20                    25                    30



661

Gly Arg Ser Ser Arg Ser Thr Ala Ser His Thr Leu His Gln Tyr Cys  
35 40 45  
Cys Pro Thr Gln Val Leu Asp Ser Met Lys Leu Thr Pro Ser Gly Arg  
50 55 60  
Leu Ala Glu Ser Arg Glu Glu Glu Glu Glu Glu Thr Glu Glu Glu  
65 70 75 80  
Glu Glu Glu Asp Ala His Gln Phe Cys Cys Pro Ala Ser Glu Cys Ser  
85 90 95  
Ser Pro Ser Ser Arg  
100

<210> 688  
<211> 62  
<212> PRT  
<213> Homo sapiens

<400> 688  
Glu Arg Asn Ala Asp Pro Pro Asp Val Ser Leu Gly Lys Ala Val Asn  
1 5 10 15  
Gln Leu Ile Phe Ile Glu Asp Leu Leu Cys Pro Leu His Arg Val Ala  
20 25 30  
Ser Val Arg Glu Ser Trp Phe Phe Pro Arg Asn Thr Asp Phe Leu Ser  
35 40 45  
Gly Arg Leu His Val Phe Ile Tyr Phe His His Ser Arg Phe  
50 55 60

<210> 689  
<211> 549  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (1)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 689

Xaa	Arg	Trp	Ala	Cys	Gly	Xaa	Leu	Leu	Leu	Leu	Val	Arg	Gly	Gln	Gly	1	5	10	15
Gln	Asp	Ser	Ala	Ser	Pro	Ile	Arg	Thr	Thr	His	Thr	Gly	Gln	Val	Leu	20	25	30	
Gly	Ser	Leu	Val	His	Val	Lys	Gly	Ala	Asn	Ala	Gly	Val	Gln	Thr	Phe	35	40	45	
Leu	Gly	Ile	Pro	Phe	Ala	Lys	Pro	Pro	Leu	Gly	Pro	Leu	Arg	Phe	Ala	50	55	60	
Pro	Pro	Glu	Pro	Pro	Glu	Ser	Trp	Ser	Gly	Val	Arg	Asp	Gly	Thr	Thr	65	70	75	80
His	Pro	Ala	Met	Cys	Leu	Gln	Asp	Leu	Thr	Ala	Val	Glu	Ser	Glu	Phe	85	90	95	
Leu	Ser	Gln	Phe	Asn	Met	Thr	Phe	Pro	Ser	Asp	Ser	Met	Ser	Glu	Asp	100	105	110	
Cys	Leu	Tyr	Leu	Ser	Ile	Tyr	Thr	Pro	Ala	His	Ser	His	Glu	Gly	Ser	115	120	125	
Asn	Leu	Pro	Val	Met	Val	Trp	Ile	His	Gly	Gly	Ala	Leu	Val	Phe	Gly	130	135	140	
Met	Ala	Ser	Leu	Tyr	Asp	Gly	Ser	Met	Leu	Ala	Ala	Leu	Glu	Asn	Val	145	150	155	160
Val	Val	Val	Ile	Ile	Gln	Tyr	Arg	Leu	Gly	Val	Leu	Gly	Phe	Phe	Ser	165	170	175	
Thr	Gly	Asp	Lys	His	Ala	Thr	Gly	Asn	Trp	Gly	Tyr	Leu	Asp	Gln	Val	180	185	190	
Ala	Ala	Leu	Arg	Trp	Val	Gln	Gln	Asn	Ile	Ala	His	Phe	Gly	Gly	Asn	195	200	205	
Pro	Asp	Arg	Val	Thr	Ile	Phe	Gly	Glu	Ser	Ala	Gly	Gly	Thr	Ser	Val	210	215	220	
Ser	Ser	Leu	Val	Val	Ser	Pro	Ile	Ser	Gln	Gly	Leu	Phe	His	Gly	Ala	225	230	235	240
Ile	Met	Glu	Ser	Gly	Val	Ala	Leu	Leu	Pro	Gly	Leu	Ile	Ala	Ser	Ser	245	250	255	

Ala Asp Val Ile Ser Thr Val Val Ala Asn Leu Ser Ala Cys Asp Gln  
260 265 270

Val Asp Ser Glu Ala Leu Val Gly Cys Leu Arg Gly Lys Ser Lys Glu  
275 280 285

Glu Ile Leu Ala Ile Asn Lys Pro Phe Lys Met Ile Pro Gly Val Val  
290 295 300

Asp Gly Val Phe Leu Pro Arg His Pro Gln Glu Leu Leu Ala Ser Ala  
305 310 315 320

Asp Phe Gln Pro Val Pro Ser Ile Val Gly Val Asn Asn Asn Glu Phe  
325 330 335

Gly Trp Leu Ile Pro Lys Val Met Arg Ile Tyr Asp Thr Gln Lys Glu  
340 345 350

Met Asp Arg Glu Ala Ser Gln Ala Ala Leu Gln Lys Met Leu Thr Leu  
355 360 365

Leu Met Leu Pro Pro Thr Phe Gly Asp Leu Leu Arg Glu Glu Tyr Ile  
370 375 380

Gly Asp Asn Gly Asp Pro Gln Thr Leu Gln Ala Gln Phe Gln Glu Met  
385 390 395 400

Met Ala Asp Ser Met Phe Val Ile Pro Ala Leu Gln Val Ala His Phe  
405 410 415

Gln Cys Ser Arg Ala Pro Val Tyr Phe Tyr Glu Phe Gln His Gln Pro  
420 425 430

Ser Trp Leu Lys Asn Ile Arg Pro Pro His Met Lys Ala Asp His Gly  
435 440 445

Asp Glu Leu Pro Phe Val Phe Arg Ser Phe Phe Gly Gly Asn Tyr Ile  
450 455 460

Lys Phe Thr Glu Glu Glu Glu Gln Leu Ser Arg Lys Met Met Lys Tyr  
465 470 475 480

Trp Ala Asn Phe Ala Arg Asn Gly Asn Pro Asn Gly Glu Gly Leu Pro  
485 490 495

His Trp Pro Leu Phe Asp Gln Glu Glu Gln Tyr Leu Gln Leu Asn Leu  
500 505 510

Gln Pro Ala Val Gly Arg Ala Leu Lys Ala His Arg Leu Gln Phe Trp  
515 520 525

Lys Lys Ala Leu Pro Gln Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu  
 530 535 540

Arg His Thr Glu Leu  
 545

<210> 690

<211> 155

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (85)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 690

Ser His Arg Val Thr His Cys Pro Tyr Ala Val Ala Leu Pro Glu Val  
 1 5 10 15

Ala Pro Ala Gln Pro Leu Thr Glu Ala Leu Arg Ala Leu Cys His Val  
 20 25 30

Gly Leu Phe Xaa Phe Ala Phe Cys Ala Leu Phe Asp Cys Xaa Arg Pro  
 35 40 45

Val Xaa Gln Lys Ser Cys Asp Leu Leu Leu Phe Leu Arg Asp Lys Ile  
 50 55 60

Ala Ser Tyr Ser Ser Leu Arg Glu Ala Arg Gly Ser Pro Asn Thr Ala  
 65 70 75 80

Ser Ala Glu Ala Xaa Leu Pro Arg Trp Arg Ala Gly Glu Gln Ala Gln  
 85 90 95

665

Pro Pro Gly Asp Gln Glu Pro Glu Ala Val Leu Ala Met Leu Arg Ser  
 100 105 110

Leu Asp Leu Glu Gly Leu Arg Ser Thr Leu Ala Glu Ser Ser Asp His  
 115 120 125

Val Glu Lys Ser Pro Gln Ser Leu Leu Gln Asp Met Leu Ala Thr Gly  
 130 135 140

Gly Phe Leu Gln Gly Asp Glu Ala Asp Cys Tyr  
 145 150 155

&lt;210&gt; 691

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 691

Met Cys Leu Glu Arg Pro Leu Arg Glu Gly Pro Arg Val Met Glu Lys  
 1 5 10 15

Glu Ala Trp Pro Gly Ser Leu Glu Gly Arg Gly Gly Gly Trp Arg His  
 20 25 30

Leu Asp Cys Pro Leu Leu Ser His Thr Trp Gly Val Val Thr Pro Phe  
 35 40 45

Thr Pro Ala Arg Leu Pro Ser Ala Phe His Glu Leu His Leu Leu Pro  
 50 55 60

Thr Ser Leu Trp Arg Gly Trp Gly Pro Leu Ala Ser Thr Arg Gly Pro  
 65 70 75 80

Ser Ala Ser Pro Lys Pro Glu Pro Ser Ala Pro Gly Glu Asn Lys Trp  
 85 90 95

Leu Ser Phe Asp Thr Trp Gly Arg Arg Glu Ala Ala Gly Trp Arg Gln  
 100 105 110

Ser Gln Gly Arg Asp Thr Thr Glu Gly Asp Pro Asp Ile Pro Arg Lys  
 115 120 125

Phe Pro Ala Glu Gln Thr Ala Phe Gln Pro Glu Ala Cys Leu Asn Cys  
 130 135 140

Val Met Cys Asn Asn  
 145

666

&lt;210&gt; 692

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (160)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 692

Pro Gly Val Lys Leu Trp Asp Val Pro Val Met Leu Asp His Lys Asp  
1 5 10 15

Leu Glu Ala Glu Ile His Pro Leu Lys Asn Glu Glu Arg Lys Ser Gln  
20 25 30

Glu Asn Leu Gly Asn Pro Ser Lys Asn Glu Asp Asn Val Lys Ser Ala  
35 40 45

Pro Pro Gln Ser Arg Leu Ser Arg Cys Arg Ala Ala Ala Phe Phe Leu  
50 55 60

Ser Leu Phe Leu Cys Leu Phe Val Val Phe Val Val Ser Phe Val Ile  
65 70 75 80

Pro Cys Pro Asp Arg Pro Ala Ser Gln Arg Met Trp Arg Ile Asp Tyr  
85 90 95

Ser Ala Ala Val Ile Tyr Asp Phe Leu Ala Val Asp Asp Ile Asn Gly  
100 105 110

Asp Arg Ile Gln Asp Val Leu Phe Leu Tyr Lys Asn Thr Asn Ser Ser  
115 120 125

Asn Asn Phe Ser Arg Ser Cys Val Asp Glu Gly Phe Ser Ser Pro Cys  
130 135 140

Thr Phe Ala Ala Ala Val Ser Gly Ala Asn Ala Ala Arg Ser Gly Xaa  
145 150 155 160

Asp Leu Trp Pro Lys Thr Trp Pro Ser Trp Ser Val Leu Cys Pro Ser  
165 170 175

Gln Glu Ala Val Arg His Leu Leu Pro Ala Ser Trp Trp Ala Asp Pro  
180 185 190

Val Leu Ser Leu Gln Ser Thr Cys Ser Gln Gly Lys Pro Trp Lys Pro  
195 200 205

667

Gln Pro Ala Val Gln Gly Glu Trp Ser Ile  
210 215

<210> 693  
<211> 68  
<212> PRT  
<213> Homo sapiens

<400> 693  
Ser Cys Asn Ser Ser Asn Asn Ile Leu Gln Leu Pro Tyr Arg Asn Arg  
1 5 10 15  
Ser Gly Arg Ala Lys Ser Asp Leu Gly Lys Val Ile Arg Tyr Arg Leu  
20 25 30  
Ser Ile Pro Phe Pro Lys Met Leu Gly Thr Arg Ser Ile Ser Asp Phe  
35 40 45  
Ile Ile Phe Phe Lys Val Trp Asn Ile Cys Ile Ile Leu Thr Ser Trp  
50 55 60  
Ala Ser Gln Ile  
65

<210> 694  
<211> 234  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (3)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (4)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (219)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 694  
Cys Ala Xaa Xaa Leu Arg Gly Phe Asp Gln Gln Met Ser Ser Met Val

668

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1           5           10           15
Ile Glu His Met Ala Ser His Gly Thr Arg Phe Leu Arg Gly Cys Ala
      20           25           30
Pro Ser Arg Val Arg Arg Leu Pro Asp Gly Gln Leu Gln Val Thr Trp
      35           40           45
Glu Asp Ser Thr Thr Gly Lys Glu Asp Thr Gly Thr Phe Asp Thr Val
      50           55           60
Leu Trp Ala Ile Gly Arg Val Pro Asp Thr Arg Ser Leu Asn Leu Glu
      65           70           75           80
Lys Ala Gly Val Asp Thr Ser Pro Asp Thr Gln Lys Ile Leu Val Asp
      85           90           95
Ser Arg Glu Ala Thr Ser Val Pro His Ile Tyr Ala Ile Gly Asp Val
      100          105          110
Val Glu Gly Arg Pro Glu Leu Thr Pro Thr Ala Ile Met Ala Gly Arg
      115          120          125
Leu Leu Val Gln Arg Leu Phe Gly Gly Ser Ser Asp Leu Met Asp Tyr
      130          135          140
Asp Asn Val Pro Thr Thr Val Phe Thr Pro Leu Glu Tyr Gly Cys Val
      145          150          155          160
Gly Leu Ser Glu Glu Glu Ala Val Ala Arg His Gly Gln Glu His Val
      165          170          175
Glu Val Tyr His Ala His Tyr Lys Pro Leu Glu Phe Thr Val Ala Gly
      180          185          190
Arg Asp Ala Ser Gln Cys Tyr Val Lys Met Val Cys Leu Arg Glu Pro
      195          200          205
Pro Gln Leu Val Leu Gly Leu His Phe Leu Xaa Pro Thr Gln Ala Asn
      210          215          220
Tyr Ser Arg Ile Cys Ser Gly Asp Lys Cys
      225          230

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&lt;210&gt; 695

&lt;211&gt; 460

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



669

&lt;400&gt; 695

Pro Cys Pro Pro Arg Pro Gln Glu Leu Pro Gly Arg Ser Pro Ser Ser  
 1 5 10 15  
 Trp Ser Ala Leu Gly Trp Pro Ala Ala Leu Gly Gly Gly Val Val Ala  
 20 25 30  
 Val Ala Val Cys Glu Pro Val Ala Arg Leu Leu Trp Ala Gly Thr Leu  
 35 40 45  
 Lys Ile Ala Ala Met Ala Glu Asn Gly Asp Asn Glu Lys Met Ala Ala  
 50 55 60  
 Leu Glu Ala Lys Ile Cys His Gln Ile Glu Tyr Tyr Phe Gly Asp Phe  
 65 70 75 80  
 Asn Leu Pro Arg Asp Lys Phe Leu Lys Glu Gln Ile Lys Leu Asp Glu  
 85 90 95  
 Gly Trp Val Pro Leu Glu Ile Met Ile Lys Phe Asn Arg Leu Asn Arg  
 100 105 110  
 Leu Thr Thr Asp Phe Asn Val Ile Val Glu Ala Leu Ser Lys Ser Lys  
 115 120 125  
 Ala Glu Leu Met Glu Ile Ser Glu Asp Lys Thr Lys Ile Arg Arg Ser  
 130 135 140  
 Pro Ser Lys Pro Leu Pro Glu Val Thr Asp Glu Tyr Lys Asn Asp Val  
 145 150 155 160  
 Lys Asn Arg Ser Val Tyr Ile Lys Gly Phe Pro Thr Asp Ala Thr Leu  
 165 170 175  
 Asp Asp Ile Lys Glu Trp Leu Glu Asp Lys Gly Gln Val Leu Asn Ile  
 180 185 190  
 Gln Met Arg Arg Thr Leu His Lys Ala Phe Lys Gly Ser Ile Phe Val  
 195 200 205  
 Val Phe Asp Ser Ile Glu Ser Ala Lys Lys Phe Val Glu Thr Pro Gly  
 210 215 220  
 Gln Lys Tyr Lys Glu Thr Asp Leu Leu Ile Leu Phe Lys Asp Asp Tyr  
 225 230 235 240  
 Phe Ala Lys Lys Asn Glu Glu Arg Lys Gln Asn Lys Val Glu Ala Lys  
 245 250 255  
 Leu Arg Ala Lys Gln Glu Gln Glu Ala Lys Gln Lys Leu Glu Glu Asp  
 260 265 270

670

Ala Glu Met Lys Ser Leu Glu Glu Lys Ile Gly Cys Leu Leu Lys Phe  
 275 280 285  
 Ser Gly Asp Leu Asp Asp Gln Thr Cys Arg Glu Asp Leu His Ile Leu  
 290 295 300  
 Phe Ser Asn His Gly Glu Ile Lys Trp Ile Asp Phe Val Arg Gly Ala  
 305 310 315 320  
 Lys Glu Gly Ile Ile Leu Phe Lys Glu Lys Ala Lys Glu Ala Leu Gly  
 325 330 335  
 Lys Ala Lys Asp Ala Asn Asn Gly Asn Leu Gln Leu Arg Asn Lys Glu  
 340 345 350  
 Val Thr Trp Glu Val Leu Glu Gly Glu Val Glu Lys Glu Ala Leu Lys  
 355 360 365  
 Lys Ile Ile Glu Asp Gln Gln Glu Ser Leu Asn Lys Trp Lys Ser Lys  
 370 375 380  
 Gly Arg Arg Phe Lys Gly Lys Gly Lys Gly Asn Lys Ala Ala Gln Pro  
 385 390 395 400  
 Gly Ser Gly Lys Gly Lys Val Gln Phe Gln Gly Lys Lys Thr Lys Phe  
 405 410 415  
 Ala Ser Asp Asp Glu His Asp Glu His Asp Glu Asn Gly Ala Thr Gly  
 420 425 430  
 Pro Val Lys Arg Ala Arg Glu Glu Thr Asp Lys Glu Glu Pro Ala Ser  
 435 440 445  
 Lys Gln Gln Lys Thr Glu Asn Gly Ala Gly Asp Gln  
 450 455 460

&lt;210&gt; 696

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 696

Gly Glu Glu Gly Val Gly Ser Pro Ser Gly Ile Leu Ala Thr Pro Leu  
 1 5 10 15

Arg Ser Ala Arg Gly Thr Thr His Thr His Thr His Thr His  
 20 25 30

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<220>  
<221> SITE  
<222> (30)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 697

Trp Pro Arg Arg Pro Gly Pro His Leu Gly Val Leu Glu Phe Pro Gly  
1 5 10 15

Ala Gly Cys Gly Ala Ser Ala Ala Gly Trp Pro Ser Ala Xaa Met Leu  
20 25 30

Pro Gly Arg Gly Pro Arg Pro Phe Arg Ala Arg Leu Val Gly Arg Glu  
35 40 45

Leu Val Ser Met Leu Ala Arg Glu Leu Pro Ala Ala Val Ala Pro Ala  
50 55 60

Gly Pro Ala Ser Leu Ala Arg Trp Thr Leu Gly Phe Cys Asp Glu Arg  
65 70 75 80

Leu Val Pro Phe Asp His Ala Glu Ser Thr Tyr Gly Leu Tyr Arg Thr  
85 90 95

His Leu Leu Ser Arg Leu Pro Ile Pro Glu Ser Gln Val Ile Thr Ile  
100 105 110

Asn Pro Glu Leu Pro Val Glu Glu Ala Ala Glu Asp Tyr Ala Lys Lys  
115 120 125

Leu Arg Gln Ala Phe Gln Gly Asp Ser Ile Pro Val Phe Asp Leu Leu  
130 135 140

672

Ile Leu Gly Val Gly Pro Asp Gly His Thr Cys Ser Leu Phe Pro Asp  
 145                      150                      155                      160  
 His Pro Leu Leu Gln Glu Arg Glu Lys Ile Val Ala Pro Ile Ser Asp  
                     165                      170                      175  
 Ser Pro Lys Pro Pro Pro Gln Arg Val Thr Leu Thr Leu Pro Val Leu  
                     180                      185                      190  
 Asn Ala Ala Arg Thr Val Ile Phe Val Ala Thr Gly Glu Gly Lys Ala  
                     195                      200                      205  
 Ala Val Leu Lys Arg Ile Leu Glu Asp Gln Glu Glu Asn Pro Leu Pro  
                     210                      215                      220  
 Ala Ala Leu Val Gln Pro His Thr Gly Lys Leu Cys Trp Phe Leu Asp  
 225                      230                      235                      240  
 Glu Ala Ala Ala Arg Leu Leu Thr Val Pro Phe Glu Lys His Ser Thr  
                     245                      250                      255  
 Leu

&lt;210&gt; 698

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 698

Gln Tyr Lys Thr Pro Ala Val Asp Thr Thr Met Met Thr Phe His Glu  
   1                      5                      10                      15  
 Leu Val Phe Leu Val Leu Thr Ala Lys Phe Val Leu Phe Thr Gly Gln  
                     20                      25                      30  
 Ile Ser Asn Lys Val Leu Gly Leu Lys Ile His Gly Trp Thr Glu Val  
                     35                      40                      45  
 Pro Tyr Pro Leu Thr Met Glu Ala Gly Ala Thr Phe Trp Gly Tyr Leu  
                     50                      55                      60  
 Phe Leu Asn Phe  
 65

&lt;210&gt; 699

673

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 699

Pro Cys Ser Ala Thr Thr Ala Trp Val Lys Ser Ser Ile Lys Thr His  
 1 5 10 15

Leu Cys Ala Ser Leu Arg His Ile Arg Phe Leu Leu Ser Val Cys Leu  
 20 25 30

Leu Cys Leu Val Ala Gly Thr Ala Val Ala Val Lys Met Ala Ser Thr  
 35 40 45

Ser Arg Leu Asp Ala Leu Pro Arg Val Thr Cys Pro Asn His Pro Asp  
 50 55 60

Ala Ile Leu Val Glu Asp Tyr Arg Ala Gly Asp Met Ile Cys Pro Glu  
 65 70 75 80

Cys Gly Leu Val Val Gly Asp Arg Val Ile Asp Val Gly Ser Glu Trp  
 85 90 95

Arg Thr Phe Ser Asn Asp Lys Ala Thr Lys Asp Pro Ser Arg Val Gly  
 100 105 110

Asp Ser Gln Asn Pro Leu Leu Ser Asp Gly Asp Leu Ser Thr Met Ile  
 115 120 125

Gly Lys Gly Thr Gly Ala Ala Ser Phe Asp Glu Phe Gly Asn Ser Lys  
 130 135 140

Tyr Gln Asn Arg Arg Thr Met Ser Ser Ser Asp Arg Ala Met Met Asn  
 145 150 155 160

Ala Phe Lys Glu Ile Thr Thr Met Ala Asp Arg Ile Asn Leu Pro Arg  
 165 170 175

Asn Ile Val Asp Arg Thr Asn Asn Leu Phe Lys Gln Val Tyr Glu Gln  
 180 185 190

Lys Ser Leu Lys Gly Arg Ala Asn Asp Ala Ile Ala Ser Ala Cys Leu  
 195 200 205

Tyr Ile Ala Cys Arg Gln Glu Gly Val Pro Arg Thr Phe Lys Glu Ile  
 210 215 220

Cys Ala Val Ser Arg Ile Ser Lys Lys Glu Ile Gly Arg Cys Phe Lys  
 225 230 235 240

Leu Ile Leu Lys Ala Leu Glu Thr Ser Val Asp Leu Ile Thr Thr Gly

674

245	250	255
Asp Phe Met Ser Arg Phe Cys Ser Asn Leu Cys Leu Pro Lys Gln Val		
260	265	270
Gln Met Ala Ala Thr His Ile Ala Arg Lys Ala Val Glu Leu Asp Leu		
275	280	285
Val Pro Gly Arg Ser Pro Ile Ser Val Ala Ala Ala Ile Tyr Met		
290	295	300
Ala Ser Gln Ala Ser Ala Glu Lys Arg Thr Gln Lys Glu Ile Gly Asp		
305	310	315
Ile Ala Gly Val Ala Asp Val Thr Ile Arg Gln Ser Tyr Arg Leu Ile		
325	330	335
Tyr Pro Arg Ala Pro Asp Leu Phe Pro Thr Asp Phe Lys Phe Asp Thr		
340	345	350
Pro Val Asp Lys Leu Pro Gln Leu		
355	360	

<210> 700  
 <211> 364  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (30)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (353)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (360)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 700

675

Pro Ser Trp Leu Arg Ala Arg Ser Ser Arg Ser Trp Xaa Ala Ser Pro  
 1 5 10 15  
 Arg Gly Pro Gln Pro Pro Arg Ile Arg Ala Arg Ser Ala Xaa Pro Met  
 20 25 30  
 Glu Gly Ala Arg Val Phe Gly Ala Leu Gly Pro Ile Gly Pro Ser Ser  
 35 40 45  
 Pro Gly Leu Thr Leu Gly Gly Leu Ala Val Ser Glu His Arg Leu Ser  
 50 55 60  
 Asn Lys Leu Leu Ala Trp Ser Gly Val Leu Glu Trp Gln Glu Lys Arg  
 65 70 75 80  
 Arg Pro Tyr Ser Asp Ser Thr Ala Lys Leu Lys Arg Thr Leu Pro Cys  
 85 90 95  
 Gln Ala Tyr Val Asn Gln Gly Glu Asn Leu Glu Thr Asp Gln Trp Pro  
 100 105 110  
 Gln Lys Leu Ile Met Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu  
 115 120 125  
 Gly Pro Leu Phe Arg Asn Ser Gln Leu Ala Gln Phe His Phe Thr Asn  
 130 135 140  
 Arg Asp Cys Asp Ser Leu Lys Gly Leu Cys Arg Ile Met Gly Asn Gly  
 145 150 155 160  
 Phe Ala Gly Cys Met Leu Phe Pro His Ile Ser Pro Cys Glu Val Arg  
 165 170 175  
 Val Leu Met Leu Leu Tyr Ser Ser Lys Lys Lys Ile Phe Met Gly Leu  
 180 185 190  
 Ile Pro Tyr Asp Gln Ser Gly Phe Val Ser Ala Ile Arg Gln Val Ile  
 195 200 205  
 Thr Thr Arg Lys Gln Ala Val Gly Pro Gly Gly Val Asn Ser Gly Pro  
 210 215 220  
 Val Gln Ile Val Asn Asn Lys Phe Leu Ala Trp Ser Gly Val Met Glu  
 225 230 235 240  
 Trp Gln Glu Pro Arg Pro Glu Pro Asn Ser Arg Ser Lys Arg Trp Leu  
 245 250 255  
 Pro Ser His Val Tyr Val Asn Gln Gly Glu Ile Leu Arg Thr Glu Gln  
 260 265 270

676

Trp Pro Arg Lys Leu Tyr Met Gln Leu Ile Pro Gln Gln Leu Leu Thr  
 275 280 285  
 Thr Leu Val Pro Leu Phe Arg Asn Ser Arg Leu Val Gln Phe His Phe  
 290 295 300  
 Thr Lys Asp Leu Glu Thr Leu Lys Ser Leu Cys Arg Ile Met Asp Asn  
 305 310 315 320  
 Gly Phe Ala Gly Cys Val His Phe Ser Tyr Lys Ala Ser Cys Glu Ile  
 325 330 335  
 Arg Val Leu Met Leu Leu Tyr Ser Ser Glu Lys Lys Ile Phe Ile Gly  
 340 345 350  
 Xaa Ile Pro His Asp Gln Gly Xaa Phe Val Gln Arg  
 355 360

&lt;210&gt; 701

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 701

Gly Thr Arg Gly Ile Leu His Val Ala Val Pro Ala Arg Gly Thr His  
 1 5 10 15

Ala Gln Cys Cys Arg Asn Trp Thr Val Pro Asp Ser Gly Gln Gly Lys  
 20 25 30

Xaa Val Met Leu Glu Gly Gln Gly Arg Leu Glu Arg Val His Ile Pro  
 35 40 45

Leu Ser Ala Pro Ala Ser Ala Thr Val Gln Arg Pro Thr Gly Pro Gln  
 50 55 60

Pro Val Ala Cys Pro His Cys Pro Val Pro Thr Ser Asn Ser Pro Gln  
 65 70 75 80

Pro Leu Val Ala Ser Val Pro Cys Pro Leu Gly Phe Ser Ser Gln Pro  
 85 90 95

Ser Gly Leu Gly Leu Cys Arg Lys Val Met Pro Thr Gly Thr Leu Leu  
 100 105 110



677

Thr Pro Gly Ser Phe Met Asp Val Val Ser Glu Leu Arg Thr Arg Gly  
 115 120 125

Cys Gln Met Phe Leu Ala Pro His Val Ser Phe Arg Thr Glu Gln Lys  
 130 135 140

His Lys Asp Ser Ala Lys Ser Ser Leu Tyr Ser Leu  
 145 150 155

<210> 702

<211> 150

<212> PRT

<213> Homo sapiens

<400> 702

Ala Gly His Gly Leu Gly Val Arg Ala Gly Leu Lys Glu Phe Ala Thr  
 1 5 10 15

Asn Leu Thr Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu  
 20 25 30

Thr Phe Asp Tyr Ser Asp Leu Ala Leu Leu Leu Gln Ile Pro Thr Gln  
 35 40 45

Asn Ala Gln Ala Arg Gln Leu Leu Glu Lys Glu Phe Ser Asn Leu Ile  
 50 55 60

Ser Leu Gly Thr Asp Arg Arg Leu Asp Glu Asp Ser Ala Lys Ser Phe  
 65 70 75 80

Ser Arg Ser Pro Ser Trp Arg Lys Met Phe Arg Glu Lys Asp Leu Arg  
 85 90 95

Gly Val Thr Pro Asp Ser Ala Glu Met Leu Pro Pro Asn Phe Arg Ser  
 100 105 110

Ala Ala Ala Gly Ala Leu Gly Ser Pro Gly Leu Pro Leu Arg Lys Leu  
 115 120 125

Gln Pro Glu Gly Gln Thr Ser Gly Ser Ser Arg Ala Asp Gly Val Ser  
 130 135 140

Val Arg Thr Tyr Ser Cys  
 145 150

<210> 703

<211> 527  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (243)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (257)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (259)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (471)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (477)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (480)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (484)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (511)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (519)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 703  
Cys Val Cys Val Glu Gly Val Glu Gly Pro Arg Cys Asp Lys Cys Thr

679

1	5	10	15
Arg Gly Tyr Ser Gly Val Phe Pro Asp Cys Thr Pro Cys His Gln Cys	20	25	30
Phe Ala Leu Trp Asp Val Ile Ile Ala Glu Leu Thr Asn Arg Thr His	35	40	45
Arg Phe Leu Glu Lys Ala Lys Ala Leu Lys Ile Ser Gly Val Ile Gly	50	55	60
Pro Tyr Arg Glu Thr Val Asp Ser Val Glu Arg Lys Val Ser Glu Ile	65	70	75
Lys Asp Ile Leu Ala Gln Ser Pro Ala Ala Glu Pro Leu Lys Asn Ile	85	90	95
Gly Asn Leu Phe Glu Glu Ala Glu Lys Leu Ile Lys Asp Val Thr Glu	100	105	110
Met Met Ala Gln Val Glu Val Lys Leu Ser Asp Thr Thr Ser Gln Ser	115	120	125
Asn Ser Thr Ala Lys Glu Leu Asp Ser Leu Gln Thr Glu Ala Glu Ser	130	135	140
Leu Asp Asn Thr Val Lys Glu Leu Ala Glu Gln Leu Glu Phe Ile Lys	145	150	155
Asn Ser Asp Ile Arg Gly Ala Leu Asp Ser Ile Thr Lys Tyr Phe Gln	165	170	175
Met Ser Leu Glu Ala Glu Glu Arg Val Asn Ala Ser Thr Thr Glu Pro	180	185	190
Asn Ser Thr Val Glu Gln Ser Ala Leu Met Arg Asp Arg Val Glu Asp	195	200	205
Val Met Met Glu Arg Glu Ser Gln Phe Lys Glu Lys Gln Glu Glu Gln	210	215	220
Ala Arg Leu Leu Asp Glu Leu Ala Gly Lys Leu Gln Ser Leu Asp Leu	225	230	235
Ser Ala Xaa Ala Glu Met Thr Cys Gly Thr Pro Pro Gly Ala Ser Cys	245	250	255
Xaa Glu Xaa Glu Cys Gly Gly Pro Asn Cys Arg Thr Asp Glu Gly Glu	260	265	270
Arg Lys Cys Gly Gly Pro Gly Cys Gly Gly Leu Val Thr Val Ala His			

680

275	280	285
Asn Ala Trp Gln Lys Ala Met Asp Leu Asp Gln Asp Val Leu Ser Ala		
290	295	300
Leu Ala Glu Val Glu Gln Leu Ser Lys Met Val Ser Glu Ala Lys Leu		
305	310	315 320
Arg Ala Asp Glu Ala Lys Gln Ser Ala Glu Asp Ile Leu Leu Lys Thr		
	325 330	335
Asn Ala Thr Lys Glu Lys Met Asp Lys Ser Asn Glu Glu Leu Arg Asn		
	340 345	350
Leu Ile Lys Gln Ile Arg Asn Phe Leu Thr Gln Asp Ser Ala Asp Leu		
	355 360	365
Asp Ser Ile Glu Ala Val Ala Asn Glu Val Leu Lys Met Glu Met Pro		
	370 375	380
Ser Thr Pro Gln Gln Leu Gln Asn Leu Thr Glu Asp Ile Arg Glu Arg		
	385 390	395 400
Val Glu Ser Leu Ser Gln Val Glu Val Ile Leu Gln His Ser Ala Ala		
	405 410	415
Asp Ile Ala Arg Ala Glu Met Leu Leu Glu Glu Ala Lys Arg Ala Ser		
	420 425	430
Lys Ser Ala Thr Asp Val Lys Val Thr Ala Asp Met Val Lys Glu Ala		
	435 440	445
Leu Glu Glu Ala Glu Lys Ala Gln Val Ala Ala Glu Lys Ala Ile Lys		
	450 455	460
Gln Ala Asp Glu Asp Ile Xaa Arg Asn Pro Glu Pro Xaa Asn Phe Xaa		
	465 470	475 480
Leu Glu Phe Xaa Lys Gln Gln Leu Ser Gly Gly Asn Leu Val Gln Arg		
	485 490	495
Val Pro Arg Ala Ser Ser Glu Phe Arg Glu Asp Val Gly Arg Xaa Leu		
	500 505	510
Ser Gly Lys Leu Ala Gln Xaa Pro Gly Gly Gly Arg Ile Phe Trp		
	515 520	525

&lt;210&gt; 704

&lt;211&gt; 62

681

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 704

Val Tyr Gln Arg Lys Ser Thr Val Val Leu Gly Gly Phe Leu Leu Trp  
 1 5 10 15

Asp Ile Asp Phe Leu Phe Phe Phe Arg Asn Ile Val Cys Cys Asn Leu  
 20 25 30

Asn Lys Asn Tyr Asp Ile Leu Arg Tyr Phe Ile Asp Lys Pro Asn Lys  
 35 40 45

Asn Ile Cys Phe Tyr Phe Lys Val Asn Val Phe Leu Phe Ser  
 50 55 60

&lt;210&gt; 705

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 705

Thr Glu Asp Leu Phe Gly Phe Lys His Leu Leu Arg Gln Tyr Leu Leu  
 1 5 10 15

Gly Lys Pro Asn Ile Ala Asn Gly Gln Phe Asp Phe Asn Phe Ser Lys  
 20 25 30

Asp Thr Leu Leu Ser Arg Arg Leu Lys Cys Leu His  
 35 40

&lt;210&gt; 706

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 706

Xaa Gly Arg Ala Trp Val Met Ala Ala Pro Gly Ala Leu Leu Val Met  
 1 5 10 15

Gly Val Ser Gly Ser Gly Lys Ser Thr Val Gly Ala Leu Leu Ala Ser  
 20 25 30

682

Glu Leu Gly Trp Lys Phe Tyr Asp Ala Asp Asp Tyr His Pro Glu Glu  
           35                          40                          45  
 Asn Arg Arg Lys Met Gly Lys Gly Ile Pro Leu Asn Asp Gln Asp Arg  
           50                          55                          60  
 Ile Pro Trp Leu Cys Asn Leu His Asp Ile Leu Leu Arg Asp Val Ala  
           65                          70                          75                          80  
 Ser Gly Gln Arg Val Val Leu Ala Cys Ser Ala Leu Lys Lys Thr Tyr  
                           85                          90                          95  
 Arg Asp Ile Leu Thr Gln Gly Lys Asp Gly Val Ala Leu Lys Cys Glu  
           100                          105                          110  
 Glu Ser Gly Lys Glu Ala Lys Gln Ala Glu Met Gln Leu Leu Val Val  
           115                          120                          125  
 His Leu Ser Gly Ser Phe Glu Val Ile Ser Gly Arg Leu Leu Lys Arg  
           130                          135                          140  
 Glu Gly His Phe Met Pro Pro Glu Leu Leu Gln Ser Gln Phe Glu Thr  
           145                          150                          155                          160  
 Leu Glu Pro Pro Ala Ala Pro Glu Asn Phe Ile Gln Ile Ser Val Asp  
                           165                          170                          175  
 Lys Asn Val Ser Glu Ile Ile Ala Thr Ile Met Glu Thr Leu Lys Met  
           180                          185                          190  
 Lys

&lt;210&gt; 707

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (102)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

683

&lt;400&gt; 707

Gly Ile Arg Gly Gln Thr Leu Trp Leu Gly Pro Leu Gly Ala Thr Leu  
 1 5 10 15  
 Trp Pro Leu Gly Ala Leu Glu Thr Ser His Val Leu Trp Ala Leu Trp  
 20 25 30  
 Arg Ala Leu Ala Leu His Gly Gly Ala Gly Arg His Cys Leu Pro Cys  
 35 40 45  
 Pro Leu Pro Ala Ala Pro Ala Leu Val Cys Arg Leu Gly Pro Gly Cys  
 50 55 60  
 Leu Leu Leu Gly Val Trp Pro Arg Ala Pro Val Lys Pro Trp Arg His  
 65 70 75 80  
 Cys Val Cys Val Met Gly Ser Glu Gly Leu Val Gly Ala Val His Trp  
 85 90 95  
 Ser Ser Ser Leu Pro Xaa Xaa Ala Ile Ser Met Ala Pro Phe Ala Ala  
 100 105 110  
 Glu Asp Thr His Cys Gly Ser Val Gly  
 115 120

&lt;210&gt; 708

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 708

Asn Ser Phe Cys Tyr Phe His Ile Arg Val Gln Thr Tyr Lys Gly Ala  
 1 5 10 15  
 Cys Ser Leu Lys Val His Asn Tyr Ser Tyr Ser Val Cys Leu Tyr Cys  
 20 25 30  
 Tyr Arg Met Leu Cys Phe Gly Ala Leu Ser Ser Ala Asp Pro Arg Ser  
 35 40 45  
 Ser Val Glu Ile His Cys Leu Gly His Ser Leu Ile Arg Met Leu Ala  
 50 55 60  
 Gly Asp Phe Val Ser Asp Val Ala Ser Leu Phe Ser Val His Arg Leu  
 65 70 75 80  
 Arg Val Thr Thr Val Ala Cys Arg Val His Pro Val Gly Ala Ala Gln  
 85 90 95

684

Leu Ser Glu Ser Lys Asn Leu Pro Thr Tyr Ser Asn Val Phe Ala Leu  
 100 105 110

<210> 709  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 709  
 Arg Arg Val Trp Val Leu Phe Pro Pro Gln Arg Pro Glu Ser Gly Trp  
 1 5 10 15  
 Gly Val Ser Pro Val Glu Gly Glu Thr Val Pro Ala Leu Arg Gly Met  
 20 25 30  
 Lys Lys Ser Val Gly Leu Pro Val Ala Val Gln Cys Val Ala Leu Pro  
 35 40 45  
 Trp Gln Glu Glu Leu Cys Leu Arg Phe Met Arg Glu Val Glu Arg Leu  
 50 55 60  
 Met Thr Pro Glu Lys Gln Ser Ser  
 65 70

<210> 710  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 710  
 Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp  
 1 5 10 15  
 Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Val Ser Ala Ala  
 20 25 30  
 Gly Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln  
 35 40 45  
 Lys Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys  
 50 55 60  
 Thr Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe  
 65 70 75 80



685

Gly Leu Leu Lys

&lt;210&gt; 711

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 711

Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp  
 1 5 10 15

Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Ala Met Asp Gln  
 20 25 30

Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr Ala Asn Gln Ala  
 35 40 45

Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly Leu Leu Lys  
 50 55 60

&lt;210&gt; 712

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 712

Arg Leu Ala Asn Arg Ala Ile Met Ser His Lys Gln Ile Tyr Tyr Ser  
 1 5 10 15

Asp Lys Tyr Asp Asp Glu Glu Phe Glu Tyr Arg His Val Met Leu Pro  
 20 25 30

Lys Asp Ile Ala Lys Leu Val Pro Lys Thr His Leu Met Ser Glu Ser  
 35 40 45

Glu Trp Arg Asn Leu Gly Val Gln Gln Ser Gln Gly Trp Val His Tyr  
 50 55 60

Met Ile His Glu Pro Glu Pro His Ile Leu Leu Phe Arg Arg Pro Leu  
 65 70 75 80

Pro Lys Lys Pro Lys Lys  
 85

686

<210> 713  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (129)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 713

Val Gln Lys Ala Gly Ala Arg Ala Leu Ala Val Ala Gly Ala Ala Arg  
 1 5 10 15  
 Thr Pro Arg Ser Leu Pro Gly Arg Pro Ala Val Cys Asn Met Thr Leu  
 20 25 30  
 Glu Glu Phe Ser Ala Gly Glu Gln Lys Thr Glu Arg Met Asp Lys Val  
 35 40 45  
 Gly Asp Ala Leu Glu Glu Val Leu Ser Lys Ala Leu Ser Gln Arg Thr  
 50 55 60  
 Ile Thr Val Gly Val Tyr Glu Ala Ala Lys Leu Leu Asn Val Asp Pro  
 65 70 75 80  
 Asp Asn Val Val Leu Cys Leu Leu Ala Ala Asp Glu Asp Asp Asp Arg  
 85 90 95  
 Asp Val Ala Leu Gln Ile His Phe Thr Leu Ile Gln Ala Phe Cys Cys  
 100 105 110  
 Glu Asn Asp Ile Asn Ile Leu Arg Val Thr Thr Arg Ala Gly Trp Arg  
 115 120 125  
 Xaa Pro Ala Leu Gly Asp Arg Arg Trp Pro Arg Gly Glu Arg Gly Arg  
 130 135 140  
 Arg Ala Ala Pro Gly Pro Ala Leu Arg Val Val Thr Asn Pro His Ser  
 145 150 155 160  
 Ser Gln Trp Lys Asp Pro Ala Leu Ser Gln Leu Ile Cys Phe Cys Arg  
 165 170 175  
 Glu Ser Arg Tyr Met Asp Gln Trp Val Pro Val Ile Asn Leu Pro Glu  
 180 185 190

Arg

687

<210> 714  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (90)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (93)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (190)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 714  
 Gly Pro Gly Ala Cys Ser Gly Pro Ala Pro Ser Pro Arg Arg Pro Gln  
     1                    5                    10                    15  
 Ser Val Lys Cys Glu Pro Arg Arg Arg Gly Arg Ile Trp Pro Gly Ala  
                     20                    25                    30  
 Gly Gly Gly Val Gly Ala Ala Arg His Val His His His Gln Gly Ala  
                     35                    40                    45  
 Gln Gln Ala Gly Arg Ala Ala Pro His Arg Ser His Ala Ala Ala Gly  
                     50                    55                    60  
 Gly Gly Pro Ala Arg Arg Ala Pro Glu Met Pro Ala Ala Arg Ala Ala  
     65                    70                    75                    80  
 Asp Leu Ala Ala Pro Ala Gly Ala Ala Xaa Cys Ala Xaa Pro Gly Pro  
                     85                    90                    95  
 Trp Pro Leu Ser Ser Pro Gly Pro Arg Leu Val Phe Asn Arg Val Asn  
                     100                    105                    110  
 Gly Arg Arg Ala Pro Ser Thr Ser Pro Ser Phe Glu Gly Thr Gln Glu  
                     115                    120                    125  
 Thr Tyr Thr Val Ala His Glu Glu Asn Val Arg Phe Val Ser Glu Ala  
     130                    135                    140  
 Trp Gln Gln Val Gln Gln Gln Leu Asp Gly Gly Pro Ala Gly Glu Gly

688

145                      150                      155                      160  
 Gly Pro Arg Pro Val Gln Tyr Val Glu Arg Thr Pro Asn Pro Arg Leu  
                                  165                      170                      175  
 Gln Asn Phe Val Pro Ile Asp Leu Asp Glu Trp Trp Ala Xaa Gln Phe  
                                  180                      185                      190  
 Leu Ala Arg Ile Thr Ser Cys Ser  
                                  195                      200

<210> 715  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (15)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 715  
 Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu Val Pro Xaa Leu  
   1                                  5                                  10                                  15  
 Trp Ser Arg Glu Ala Met Ala Thr Met Glu Asn Lys Val Ile Cys  
                                   20                                  25                                  30  
 Ala Leu Val Leu Val Ser Met Leu Ala Leu Gly Thr Leu Ala Glu Ala  
                                   35                                  40                                  45  
 Gln Thr Glu Thr Cys Thr Val Ala Pro Arg Glu Arg Gln Asn Cys Gly  
                                   50                                  55                                  60  
 Phe Pro Gly Val Thr Pro Ser Gln Cys Ala Asn Lys Gly Cys Cys Phe  
   65                                  70                                  75                                  80  
 Asp Asp Thr Val Arg Gly Val Pro Trp Cys Phe Tyr Pro Asn Thr Ile  
                                   85                                  90                                  95  
 Asp Val Pro Pro Glu Glu Glu Cys Glu Phe  
                                   100                                  105

<210> 716  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

689

&lt;400&gt; 716

Glu Gly Arg Glu Ala Gly Ser Gly Leu Ser Val Asp Ser Arg Asp Lys  
 1 5 10 15  
 Gly His Glu Gly Arg Gly Leu Gly Pro Phe Arg Ile Pro Gln Asp Ser  
 20 25 30  
 Gln Val Gln Leu Cys Gln Lys Gly Thr Phe His Val Met Gln Leu Arg  
 35 40 45  
 Gly Leu Ser Leu Asn Pro Arg Leu Leu Leu Thr Leu Gly Ser Phe Asn  
 50 55 60  
 Gln Val Gly Gln Pro Leu Leu Gln Arg Gly Val Gly Trp Leu Ser Ser  
 65 70 75 80  
 Leu Ser His Ala Ala Cys Glu Asp Arg Gly Gly Gly Val Gly Ser Gly  
 85 90 95  
 Lys Ser Pro Glu Asn Arg Arg Gly Ile  
 100 105

&lt;210&gt; 717

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 717

Arg Ala Ala Gly Ile Arg His Glu Arg Gly Gly Pro Thr Gly Ser Cys  
 1 5 10 15  
 Pro Gly Leu Pro Ser Pro Pro Met Val Leu Tyr Ile Lys Tyr Pro Gly  
 20 25 30  
 Trp Arg Ser His Met Leu Leu Thr Glu Gly Gly Asn Tyr His Ser Ser  
 35 40 45  
 Leu Gly Thr Arg Cys Glu Leu Ser Cys Asp Arg Gly Phe Arg Leu Ile  
 50 55 60  
 Gly Arg Arg Ser Val Gln Cys Leu Pro Ser Arg Arg Trp Ser Gly Thr  
 65 70 75 80  
 Ala Tyr Cys Arg Gln Met Arg Cys His Ala Leu Pro Phe Ile Thr Ser  
 85 90 95  
 Gly Thr Tyr Thr Cys Thr Asn Gly Val Leu Leu Asp Ser Arg Cys Asp  
 100 105 110

690

Tyr Ser Cys Ser Ser Gly Tyr His Leu Glu Gly Asp Arg Ser Arg Ile  
 115 120 125  
 Cys Met Glu Asp Gly Arg Trp Ser Gly Gly Glu Pro Val Cys Val Asp  
 130 135 140  
 Ile Asp Pro Pro Lys Ile Arg Cys Pro His Ser Arg Glu Lys Met Ala  
 145 150 155 160  
 Glu Pro Glu Lys Leu Thr Ala Arg Val Tyr Trp Asp Pro Pro Leu Val  
 165 170 175  
 Lys Asp Ser Ala Asp Gly Thr Ile Thr Arg Val Thr Leu Arg Gly Pro  
 180 185 190  
 Glu Pro Gly Ser His Phe Pro Glu Gly Glu His Val Ile Arg Tyr Thr  
 195 200 205  
 Ala Tyr Asp Arg Ala Tyr Asn Arg Ala Ser Cys Lys Phe Ile Val Lys  
 210 215 220  
 Val Gln Val Arg Arg Cys Pro Thr Leu Lys Pro Pro Gln His Gly Tyr  
 225 230 235 240  
 Leu Thr Cys Thr Ser Ala Gly Asp Asn Tyr Gly Ala Thr Cys Glu Tyr  
 245 250 255  
 His Cys Asp Gly Gly Tyr Asp Arg Gln Gly Thr Pro Ser Arg Val Cys  
 260 265 270  
 Gln Ser Ser Arg Gln Trp Ser Gly Ser Pro Pro Ile Cys Ala Pro Met  
 275 280 285  
 Lys Ile Asn Val Asn Val Asn Ser Ala Ala Gly Leu Leu Asp Gln Phe  
 290 295 300  
 Tyr Glu Lys Gln Arg Leu Leu Ile Ile Ser Ala Pro Asp Pro Ser Asn  
 305 310 315 320  
 Arg Tyr Tyr Lys Met Gln Ile Ser Met Leu Gln Gln Ser Thr Cys Gly  
 325 330 335  
 Leu Asp Leu Arg His Val Thr Ile Ile Glu Leu Val Gly Gln Pro Pro  
 340 345 350  
 Gln Glu Val Gly Arg Ile Arg Glu Gln Gln Leu Ser Ala Asn Ile Ile  
 355 360 365  
 Glu Glu Leu Arg Gln Phe Gln Arg Leu Thr Arg Ser Tyr Phe Asn Met  
 370 375 380

691

Val Leu Ile Asp Lys Gln Gly Ile Asp Arg Asp Arg Tyr Met Glu Pro  
 385 390 395 400

Val Thr Pro Glu Glu Ile Phe Thr Phe Ile Asp Asp Tyr Leu Leu Ser  
 405 410 415

Asn Gln Glu Leu Thr Gln Arg Arg Glu Gln Arg Asp Ile Cys Glu  
 420 425 430

<210> 718

<211> 417

<212> PRT

<213> Homo sapiens

<400> 718

Gln Gly Leu Pro Asp Gly Val Trp Ala His Gly Thr Cys Pro Gly His  
 1 5 10 15

Arg Leu Val Ser Ser Gln Arg Arg Ile Ile Ala Ser Gly Ser Glu Asp  
 20 25 30

Cys Thr Val Met Val Trp Gln Ile Pro Glu Asn Gly Leu Thr Ser Pro  
 35 40 45

Leu Thr Glu Pro Val Val Val Leu Glu Gly His Thr Lys Arg Val Gly  
 50 55 60

Ile Ile Ala Trp His Pro Thr Ala Arg Asn Val Leu Leu Ser Ala Gly  
 65 70 75 80

Cys Asp Asn Val Val Leu Ile Trp Asn Val Gly Thr Ala Glu Glu Leu  
 85 90 95

Tyr Arg Leu Asp Ser Leu His Pro Asp Leu Ile Tyr Asn Val Ser Trp  
 100 105 110

Asn His Asn Gly Ser Leu Phe Cys Ser Ala Cys Lys Asp Lys Ser Val  
 115 120 125

Arg Ile Ile Asp Pro Arg Arg Gly Thr Leu Val Ala Glu Arg Glu Lys  
 130 135 140

Ala His Glu Gly Ala Arg Pro Met Arg Ala Ile Phe Leu Ala Asp Gly  
 145 150 155 160

Lys Val Phe Thr Thr Gly Phe Ser Arg Met Ser Glu Arg Gln Leu Ala  
 165 170 175

692

Leu Trp Asp Pro Glu Asn Leu Glu Glu Pro Met Ala Leu Gln Glu Leu  
 180 185 190  
 Asp Ser Ser Asn Gly Ala Leu Leu Pro Phe Tyr Asp Pro Asp Thr Ser  
 195 200 205  
 Val Val Tyr Val Cys Gly Lys Gly Asp Ser Ser Ile Arg Tyr Phe Glu  
 210 215 220  
 Ile Thr Glu Glu Pro Pro Tyr Ile His Phe Leu Asn Thr Phe Thr Ser  
 225 230 235 240  
 Lys Glu Pro Gln Arg Gly Met Gly Ser Met Pro Lys Arg Gly Leu Glu  
 245 250 255  
 Val Ser Lys Cys Glu Ile Ala Arg Phe Tyr Lys Leu His Glu Arg Lys  
 260 265 270  
 Cys Glu Pro Ile Val Met Thr Val Pro Arg Lys Ser Asp Leu Phe Gln  
 275 280 285  
 Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro Glu Ala Ala Leu Glu Ala  
 290 295 300  
 Glu Glu Trp Val Ser Gly Arg Asp Ala Asp Pro Ile Leu Ile Ser Leu  
 305 310 315 320  
 Arg Glu Ala Tyr Val Pro Ser Lys Gln Arg Asp Leu Lys Ile Ser Arg  
 325 330 335  
 Arg Asn Val Leu Ser Asp Ser Arg Pro Ala Met Ala Pro Gly Ser Ser  
 340 345 350  
 His Leu Gly Ala Pro Ala Ser Thr Thr Thr Ala Ala Asp Ala Thr Pro  
 355 360 365  
 Ser Gly Ser Leu Ala Arg Ala Gly Glu Ala Gly Lys Leu Glu Glu Val  
 370 375 380  
 Met Gln Glu Leu Arg Ala Leu Arg Ala Leu Val Lys Glu Gln Gly Asp  
 385 390 395 400  
 Arg Ile Cys Arg Leu Glu Glu Gln Leu Gly Arg Met Glu Asn Gly Asp  
 405 410 415  
 Ala

&lt;210&gt; 719



693

<211> 290  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (74)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (131)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 719  
 Glu Leu Ser Ala Ser Ala Xaa Asp Asp Gly Asn Phe Ser Leu Leu Ile  
           1                  5                  10                  15  
 Arg Ala Val Glu Glu Thr Asp Ala Gly Leu Tyr Thr Cys Asn Leu His  
                   20                  25                  30  
 His His Tyr Cys His Leu Tyr Glu Ser Leu Ala Val Arg Leu Glu Val  
           35                  40                  45  
 Thr Asp Gly Pro Pro Ala Pro Pro Pro Thr Gly Thr Ala Arg Arg Arg  
           50                  55                  60  
 Cys Trp Arg Trp Arg Ala Ala Pro Ala Xaa Leu Thr Cys Val Asn Arg  
           65                  70                  75                  80  
 Gly His Val Trp Thr Asp Arg His Val Glu Glu Ala Gln Gln Val Val  
                   85                  90                  95  
 His Trp Asp Arg Gln Pro Pro Gly Val Pro His Asp Arg Ala Asp Arg  
           100                  105                  110  
 Leu Leu Asp Leu Tyr Ala Ser Ala Ser Ala Ala Leu Arg Ala Pro Phe  
           115                  120                  125  
 Ser Ala Xaa Arg Val Ala Val Gly Ala Asp Ala Phe Lys Arg Gly Asp  
           130                  135                  140  
 Phe Ser Leu Arg Ile Glu Pro Leu Glu Val Ala Asp Glu Gly Thr Tyr  
           145                  150                  155                  160  
 Ser Cys His Leu His His His Tyr Trp Arg Ala Ala Thr Thr Ser Ser

694

165										170					175				
Met	Ser	Ser	Ser	Pro	Arg	Ala	Glu	Pro	Thr	Ser	Ser	Ser	Ser	Trp	Ala				
180								185					190						
Thr	Cys	Trp	Pro	Arg	Cys	Cys	Ser	Ser	Ser	Cys	Tyr	Trp	Ser	Leu	Ser				
195							200					205							
Ser	Trp	Pro	Pro	Ala	Gly	Arg	Gly	Gly	Tyr	Glu	Tyr	Ser	Asp	Gln	Lys				
210				215						220									
Ser	Gly	Lys	Ser	Lys	Gly	Lys	Asp	Val	Asn	Leu	Ala	Glu	Phe	Ala	Val				
225					230					235					240				
Ala	Ala	Gly	Asp	Gln	Met	Leu	Tyr	Arg	Ser	Glu	Asp	Ile	Gln	Leu	Asp				
245					250										255				
Tyr	Lys	Asn	Asn	Ile	Leu	Lys	Glu	Arg	Ala	Glu	Leu	Ala	His	Ser	Pro				
260				265											270				
Leu	Pro	Ala	Lys	Tyr	Ile	Asp	Leu	Asp	Lys	Gly	Phe	Arg	Lys	Glu	Asn				
275			280										285						
Cys	Lys																		
290																			

<210> 720

<211> 459

<212> PRT

<213> Homo sapiens

**<220>**

**<221> SITE**

<222> (50)

<223> xaa equals any of the naturally occurring L-amino acids

<400> 720

Asp Ala His Pro Lys Pro Cys Cys Glu Thr Ser Ala Ala Ala Cys Arg  
 1 5 10 15  
 Leu Val Glu Arg Ile Leu Thr Ser Trp Glu Glu Asn Asp Arg Val Gln  
 20 25 30  
 Cys Ala Gly Gly Pro Arg Lys Gly Tyr Met Gly His Leu Thr Arg Val  
 35 40 45  
 Ala Xaa Ala Leu Val Gln Asn Thr Glu Lys Gly Pro Asn Ala Glu Gln  
 50 55 60

695

Leu Arg Gln Leu Leu Lys Glu Leu Pro Ser Glu Gln Gln Glu Gln Trp  
 65 70 75 80  
 Glu Ala Phe Val Ser Gly Pro Leu Ala Glu Thr Asn Lys Lys Asn Met  
 85 90 95  
 Val Asp Leu Val Asn Thr His His Leu His Ser Ser Ser Asp Asp Glu  
 100 105 110  
 Asp Asp Arg Leu Lys Glu Phe Asn Phe Pro Glu Glu Ala Val Leu Gln  
 115 120 125  
 Gln Ala Phe Met Asp Phe Gln Met Gln Arg Met Thr Ser Ala Phe Ile  
 130 135 140  
 Asp His Phe Gly Phe Asn Asp Glu Glu Phe Gly Glu Gln Glu Glu Ser  
 145 150 155 160  
 Val Asn Ala Pro Phe Asp Lys Thr Ala Asn Ile Thr Phe Ser Leu Asn  
 165 170 175  
 Ala Asp Asp Glu Asn Pro Asn Ala Asn Leu Leu Glu Ile Cys Tyr Lys  
 180 185 190  
 Asp Arg Ile Gln Gln Phe Asp Asp Asp Glu Glu Glu Glu Asp Glu Glu  
 195 200 205  
 Glu Ala Gln Gly Ser Gly Glu Ser Asp Gly Glu Asp Gly Ala Trp Gln  
 210 215 220  
 Gly Ser Gln Leu Ala Arg Gly Ala Arg Leu Gly Gln Pro Pro Gly Val  
 225 230 235 240  
 Arg Ser Gly Gly Ser Thr Asp Ser Glu Asp Glu Glu Glu Glu Asp Glu  
 245 250 255  
 Glu Glu Glu Glu Asp Glu Glu Gly Ile Gly Cys Ala Ala Arg Gly Gly  
 260 265 270  
 Ala Thr Pro Leu Ser Tyr Pro Ser Pro Gly Pro Gln Pro Pro Gly Pro  
 275 280 285  
 Ser Trp Thr Ala Thr Phe Asp Pro Val Pro Thr Asp Ala Pro Thr Ser  
 290 295 300  
 Pro Arg Val Ser Gly Glu Glu Glu Leu His Thr Gly Pro Pro Ala Pro  
 305 310 315 320  
 Gln Gly Pro Leu Ser Val Pro Gln Gly Leu Pro Thr Gln Ser Leu Ala  
 325 330 335

Ser Pro Pro Ala Arg Asp Ala Leu Gln Leu Arg Ser Gln Asp Pro Thr  
340 345 350

Pro Pro Ser Ala Pro Gln Glu Ala Thr Glu Gly Ser Lys Val Thr Glu  
355 360 365

Pro Ser Ala Pro Cys Gln Ala Leu Val Ser Ile Gly Asp Leu Gln Ala  
370 375 380

Thr Phe His Gly Ile Arg Ser Ala Pro Ser Ser Ser Asp Ser Ala Thr  
385 390 395 400

Arg Asp Pro Ser Thr Ser Val Pro Ala Ser Gly Ala His Gln Pro Pro  
405 410 415

Gln Thr Thr Glu Gly Glu Lys Ser Pro Glu Pro Leu Gly Leu Pro Gln  
420 425 430

Ser Gln Ser Ala Gln Ala Leu Thr Pro Pro Pro Ile Pro Asn Gly Ser  
435 440 445

Ala Pro Glu Gly Pro Ala Ser Pro Gly Ser Gln  
450 455

<210> 721

<211> 523

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (327)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 721  
 Leu Gln Arg Leu Lys Leu Ile Lys Pro Leu Leu Xaa Phe Glu Ser Leu  
 1 5 10 15  
 Glu Glu Cys Tyr Met Ala Lys Ile Leu Val Ala Glu Gly Thr Arg Asp  
 20 25 30  
 Val Pro Ile Gly Ala Ile Ile Cys Ile Thr Val Gly Lys Pro Glu Asp  
 35 40 45  
 Ile Glu Ala Phe Lys Asn Tyr Thr Leu Asp Ser Ser Ala Ala Pro Thr  
 50 55 60  
 Pro Gln Ala Ala Pro Ala Pro Thr Pro Ala Ala Thr Ala Ser Pro Pro  
 65 70 75 80  
 Thr Pro Ser Ala Gln Ala Pro Gly Ser Ser Tyr Pro Pro His Met Gln  
 85 90 95  
 Val Leu Leu Pro Ala Leu Ser Pro Thr Met Thr Met Gly Thr Val Gln  
 100 105 110  
 Arg Trp Xaa Lys Lys Val Gly Glu Lys Leu Ser Glu Gly Asp Leu Leu  
 115 120 125  
 Ala Glu Ile Glu Thr Asp Lys Ala Thr Ile Gly Phe Glu Val Gln Glu  
 130 135 140  
 Glu Gly Tyr Leu Ala Lys Ile Leu Val Pro Glu Gly Thr Arg Asp Val  
 145 150 155 160  
 Pro Leu Gly Thr Pro Leu Cys Ile Ile Val Glu Lys Glu Ala Asp Ile  
 165 170 175  
 Ser Ala Phe Ala Asp Tyr Arg Pro Thr Glu Val Thr Asp Leu Lys Pro  
 180 185 190  
 Gln Xaa Pro Pro Pro Thr Pro Pro Pro Val Ala Ala Val Pro Pro Thr  
 195 200 205  
 Pro Gln Pro Leu Ala Pro Thr Pro Ser Ala Pro Cys Pro Ala Thr Pro  
 210 215 220  
 Ala Gly Pro Lys Gly Arg Val Phe Val Ser Pro Leu Ala Lys Lys Leu  
 225 230 235 240  
 Ala Val Glu Lys Gly Ile Asp Leu Thr Gln Val Lys Gly Thr Gly Pro  
 245 250 255  
 Asp Gly Arg Ile Thr Lys Lys Asp Ile Asp Ser Phe Val Pro Ser Lys  
 260 265 270

Val Ala Pro Ala Pro Ala Ala Val Val Pro Pro Thr Gly Pro Gly Met  
 275 280 285  
 Ala Pro Val Pro Thr Gly Val Phe Thr Asp Ile Pro Ile Ser Asn Ile  
 290 295 300  
 Arg Arg Val Ile Ala Gln Arg Leu Met Gln Ser Lys Gln Thr Ile Pro  
 305 310 315 320  
 His Tyr Tyr Leu Ser Ile Xaa Val Asn Met Gly Glu Val Leu Leu Val  
 325 330 335  
 Arg Lys Glu Leu Asn Lys Ile Leu Glu Gly Arg Ser Lys Ile Ser Val  
 340 345 350  
 Asn Asp Phe Ile Ile Lys Ala Ser Ala Leu Ala Cys Leu Lys Val Pro  
 355 360 365  
 Glu Ala Asn Ser Ser Trp Met Asp Thr Val Ile Arg Gln Asn His Val  
 370 375 380  
 Val Asp Val Ser Val Ala Val Ser Thr Pro Ala Gly Leu Ile Thr Pro  
 385 390 395 400  
 Ile Val Phe Asn Ala His Ile Lys Gly Val Glu Thr Ile Ala Asn Asp  
 405 410 415  
 Val Val Ser Leu Ala Thr Lys Ala Arg Glu Gly Lys Leu Gln Pro His  
 420 425 430  
 Glu Phe Gln Gly Gly Thr Phe Thr Ile Ser Asn Leu Gly Met Phe Gly  
 435 440 445  
 Ile Lys Asn Phe Ser Ala Ile Ile Asn Pro Pro Gln Ala Cys Ile Leu  
 450 455 460  
 Ala Ile Gly Ala Ser Glu Asp Lys Leu Val Pro Ala Asp Asn Glu Lys  
 465 470 475 480  
 Gly Phe Asp Val Ala Ser Met Met Ser Val Thr Leu Ser Cys Asp His  
 485 490 495  
 Arg Val Val Asp Gly Ala Val Gly Ala Gln Trp Leu Ala Glu Phe Arg  
 500 505 510  
 Lys Tyr Leu Glu Lys Pro Ile Thr Met Leu Leu  
 515 520

699

<210> 722  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (10)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 722  
 Ser Ser Arg Ser Arg Ala Ala Asp Glu Xaa Ala Leu Cys Leu Gln Cys  
     1                    5                    10                    15  
 Asp Met Asn Asp Cys Tyr Ser Arg Leu Arg Arg Leu Val Pro Thr Ile  
                     20                    25                    30  
 Pro Pro Asn Lys Lys Val Ser Lys Val Glu Ile Leu Gln His Val Ile  
             35                    40                    45  
 Asp Tyr Ile Leu Asp Leu Gln Leu Ala Leu Glu Thr His Pro Ala Leu  
     50                    55                    60  
 Leu Arg Gln Pro Pro Pro Pro Ala Pro Pro His His Pro Ala Gly Thr  
     65                    70                    75                    80  
 Cys Pro Ala Ala Pro Pro Arg Thr Pro Leu Thr Ala Leu Asn Thr Asp  
                     85                    90                    95  
 Pro Ala Gly Ala Val Asn Lys Gln Gly Asp Ser Ile Leu Cys Arg  
             100                    105                    110

<210> 723  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 723  
 Ser Gly Gly Gly Gly Gly Arg Met Ile Lys Leu Phe Ser Leu Lys Gln  
     1                    5                    10                    15  
 Gln Lys Lys Glu Glu Glu Ser Ala Gly Gly Thr Lys Gly Ser Ser Lys  
             20                    25                    30  
 Lys Ala Ser Ala Ala Gln Leu Arg Ile Gln Lys Asp Ile Asn Glu Leu  
     35                    40                    45  
 Asn Leu Pro Lys Thr Cys Asp Ile Ser Phe Ser Asp Pro Asp Asp Leu  
     50                    55                    60

700

Leu Asn Phe Lys Leu Val Ile Cys Pro Asp Glu Gly Phe Tyr Lys Ser  
 65                      70                      75                      80  
 Gly Lys Phe Val Phe Ser Phe Lys Val Gly Gln Gly Tyr Pro His Asp  
                     85                      90                      95  
 Pro Pro Lys Val Lys Cys Glu Thr Met Val Tyr His Pro Asn Ile Asp  
                     100                      105                      110  
 Leu Glu Gly Asn Val Cys Leu Asn Ile Leu Arg Glu Asp Trp Lys Pro  
                     115                      120                      125  
 Val Leu Thr Ile Asn Ser Ile Ile Tyr Gly Leu Gln Tyr Leu Phe Leu  
                     130                      135                      140  
 Glu Pro Asn Pro Glu Asp Pro Leu Asn Lys Glu Ala Ala Glu Val Leu  
 145                      150                      155                      160  
 Gln Asn Asn Arg Arg Leu Phe Glu Gln Asn Val Gln Arg Ser Met Arg  
                     165                      170                      175  
 Gly Gly Tyr Ile Gly Ser Thr Tyr Phe Glu Arg Cys Leu Lys  
                     180                      185                      190

&lt;210&gt; 724

&lt;211&gt; 524

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (247)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (417)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (440)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (443)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



701

&lt;400&gt; 724

Arg Arg Arg Arg Ala Asp Arg Ala Thr Pro Arg Glu Val Leu Glu Thr  
 1 5 10 15

Pro Gly Ala Ala Ser Val Gln Thr Leu Pro Ser Val Thr Met Lys Leu  
 20 25 30

Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu Ser Cys Val  
 35 40 45

Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp Leu Ile Tyr  
 50 55 60

Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile Leu Val Glu  
 65 70 75 80

Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys Met Glu Ala  
 85 90 95

Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu Ala His Pro  
 100 105 110

Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp Trp Pro Ala  
 115 120 125

Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe Ile Ala Asn  
 130 135 140

Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp Glu Ile Gly  
 145 150 155 160

Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg Leu Asp Pro  
 165 170 175

Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr Gln Ala Met  
 180 185 190

Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala Tyr Asn Glu  
 195 200 205

Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Gln Val Leu Lys Gln  
 210 215 220

Leu Asp Ala Gly Glu Glu Ala Thr Thr Thr Lys Ser Gln Val Leu Asp  
 225 230 235 240

Tyr Leu Ser Tyr Ala Val Xaa Gln Leu Gly Asp Leu His Arg Ala Leu  
 245 250 255

Glu Leu Thr Arg Arg Leu Leu Ser Leu Asp Pro Ser His Glu Arg Ala

260	265	270
Gly Gly Asn Leu Arg Tyr Phe Glu Gln Leu Leu Glu Glu Glu Arg Glu		
275	280	285
Lys Thr Leu Thr Asn Gln Thr Glu Ala Glu Leu Ala Thr Pro Glu Gly		
290	295	300
Ile Tyr Glu Arg Pro Val Asp Tyr Leu Pro Glu Arg Asp Val Tyr Glu		
305	310	315
Ser Leu Cys Arg Gly Glu Gly Val Lys Leu Thr Pro Arg Arg Gln Lys		
325	330	335
Arg Leu Phe Cys Arg Tyr His His Gly Asn Arg Ala Pro Gln Leu Leu		
340	345	350
Ile Ala Pro Phe Lys Glu Glu Asp Glu Trp Asp Ser Pro His Ile Val		
355	360	365
Arg Tyr Tyr Asp Val Met Ser Asp Glu Glu Ile Glu Arg Ile Lys Glu		
370	375	380
Ile Ala Lys Pro Lys Leu Ala Arg Ala Thr Val Arg Asp Pro Lys Thr		
385	390	395
Gly Val Leu Thr Val Ala Ser Tyr Arg Val Ser Lys Ser Ser Trp Leu		
405	410	415
Xaa Glu Asp Asp Asp Pro Val Val Ala Arg Val Asn Arg Arg Met Gln		
420	425	430
His Ile Thr Gly Leu Thr Val Xaa Thr Ala Xaa Leu Leu Gln Val Ala		
435	440	445
Asn Tyr Gly Val Gly Gly Gln Tyr Glu Pro His Phe Asp Phe Ser Arg		
450	455	460
Asn Asp Glu Arg Asp Thr Phe Lys His Leu Gly Thr Gly Asn Arg Val		
465	470	475
Ala Thr Phe Leu Asn Tyr Met Ser Asp Val Glu Ala Gly Gly Ala Thr		
485	490	495
Val Phe Pro Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys Gly Thr Ala		
500	505	510
Val Phe Trp Tyr Asn Leu Leu Arg Ser Gly Arg Arg		
515	520	

703

&lt;210&gt; 725

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 725

Leu Lys Met Thr Ser Leu Phe Ala Gln Glu Ile Arg Leu Ser Lys Arg  
1 5 10 15  
His Glu Glu Ile Val Ser Gln Arg Leu Met Leu Leu Gln Gln Met Glu  
20 25 30  
Asn Lys Leu Gly Asp Gln His Thr Glu Lys Ala Ser Gln Leu Gln Thr  
35 40 45  
Val Glu Thr Ala Phe Lys Arg Asn Leu Ser Leu Leu Lys Asp Ile Glu  
50 55 60  
Ala Ala Glu Lys Ser Leu Gln Thr Arg Ile His Pro Leu Pro Arg Pro  
65 70 75 80  
Glu Val Val Ser Leu Glu Thr Arg Tyr Trp Ala Ser  
85 90

&lt;210&gt; 726

&lt;211&gt; 690

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (108)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (383)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (688)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

**<222> (690)**

<223> Xaa equals any of the naturally occurring L-amino acids

Val Ser Arg Ser Pro Arg Val Pro Leu Pro Pro Arg Ser Phe Ser Arg  
1 5 10 15

Met Ala Gly Asp Ser Thr Ala Thr Ser Arg Arg Leu Gly Ala Ala Pro  
20 25 30

Asp Arg Ala Ala Pro His Ile Leu Pro Ala Gly Ala His Arg Ala Ala  
35 40 45

Thr Ala Pro Gly Leu Gly Gly Gly Pro Glu Pro Leu Gly Arg Ala Leu  
50 55 60

Ala Gly Gly Leu Arg Gly Pro Gln Gly Asn Gly Trp Leu Gln Glu Arg  
65 70 75 80

Lys Arg Arg Cys Pro Gly Leu Ala Gly Cys Phe Glu Ala Ile Ser Cys  
85 90 95

Gly Thr Gly Leu Gly Leu Pro Gly Leu Ala Leu Xaa Arg Glu Leu Ile  
100 105 110

Ser Trp Gly Ala Pro Gly Ser Ala Asp Ser Xaa Arg Leu Leu His Trp  
115 120 125

Gly Ser His Pro Thr Ala Phe Val Val Ser Tyr Ala Ala Ala Leu Pro  
130 135 140

Ala Ala Ala Leu Trp His Lys Leu Gly Ser Leu Trp Val Pro Gly Gly  
145 150 155 160

Gln Gly Gly Ser Gly Asn Pro Val Arg Arg Leu Leu Gly Cys Leu Gly  
165 170 175

Ser Glu Thr Arg Arg Leu Ser Leu Phe Leu Val Leu Val Val Leu Ser  
180 185 190

Ser Leu Gly Glu Met Ala Ile Pro Phe Phe Thr Gly Arg Leu Thr Asp  
195 200 205

Trp Ile Leu Gln Asp Gly Ser Ala Asp Thr Phe Thr Arg Asn Leu Thr  
210 215 220

Leu Met Ser Ile Leu Thr Ile Ala Ser Ala Val Leu Glu Phe Val Gly  
225                      230                      235                      240

705

Asp Gly Ile Tyr Asn Asn Thr Met Gly His Val His Ser His Leu Gln  
 245 250 255  
 Gly Glu Val Phe Gly Ala Val Leu Arg Gln Glu Thr Glu Phe Phe Gln  
 260 265 270  
 Gln Asn Gln Thr Gly Asn Ile Met Ser Arg Val Thr Glu Asp Thr Ser  
 275 280 285  
 Thr Leu Ser Asp Ser Leu Ser Glu Asn Leu Ser Leu Phe Leu Trp Tyr  
 290 295 300  
 Leu Val Arg Gly Leu Cys Leu Leu Gly Ile Met Leu Trp Gly Ser Val  
 305 310 315 320  
 Ser Leu Thr Met Val Thr Leu Ile Thr Leu Pro Leu Leu Phe Leu Leu  
 325 330 335  
 Pro Lys Lys Val Gly Lys Trp Tyr Gln Leu Leu Glu Val Gln Val Arg  
 340 345 350  
 Glu Ser Leu Ala Lys Ser Ser Gln Val Ala Ile Glu Ala Leu Ser Ala  
 355 360 365  
 Met Pro Thr Val Arg Ser Phe Ala Asn Glu Glu Gly Glu Ala Xaa Lys  
 370 375 380  
 Phe Arg Glu Lys Leu Gln Glu Ile Lys Thr Leu Asn Gln Lys Glu Ala  
 385 390 395 400  
 Val Ala Tyr Ala Val Asn Ser Trp Thr Thr Ser Ile Ser Gly Met Leu  
 405 410 415  
 Leu Lys Val Gly Ile Leu Tyr Ile Gly Gly Gln Leu Val Thr Ser Gly  
 420 425 430  
 Ala Val Ser Ser Gly Asn Leu Val Thr Phe Val Leu Tyr Gln Met Gln  
 435 440 445  
 Phe Thr Gln Ala Val Glu Val Leu Leu Ser Ile Tyr Pro Arg Val Gln  
 450 455 460  
 Lys Ala Val Gly Ser Ser Glu Lys Ile Phe Glu Tyr Leu Asp Arg Thr  
 465 470 475 480  
 Pro Arg Cys Pro Pro Ser Gly Leu Leu Thr Pro Leu His Leu Glu Gly  
 485 490 495  
 Leu Val Gln Phe Gln Asp Val Ser Phe Ala Tyr Pro Asn Arg Pro Asp  
 500 505 510

Val Leu Val Leu Gln Gly Leu Thr Phe Thr Leu Arg Pro Gly Glu Val  
 515 520 525  
 Thr Ala Leu Val Gly Pro Asn Gly Ser Gly Lys Ser Thr Val Ala Ala  
 530 535 540  
 Leu Leu Gln Asn Leu Tyr Gln Pro Thr Gly Gly Gln Leu Leu Leu Asp  
 545 550 555 560  
 Gly Lys Pro Leu Pro Gln Tyr Glu His Arg Tyr Leu His Arg Gln Val  
 565 570 575  
 Ala Ala Val Gly Gln Glu Pro Gln Val Phe Gly Arg Ser Leu Gln Glu  
 580 585 590  
 Asn Ile Ala Tyr Gly Leu Thr Gln Lys Pro Thr Met Glu Glu Ile Thr  
 595 600 605  
 Ala Ala Ala Val Lys Ser Gly Ala His Ser Phe Ile Ser Gly Leu Pro  
 610 615 620  
 Gln Gly Tyr Asp Thr Glu Val Asp Glu Ala Gly Ser Gln Leu Ser Gly  
 625 630 635 640  
 Gly Gln Arg Gln Ala Val Ala Leu Ala Arg Ala Leu Ile Arg Lys Pro  
 645 650 655  
 Cys Val Leu Ile Leu Asp Asp Ala Thr Ser Ala Leu Asp Ala Asn Ser  
 660 665 670  
 Gln Leu Gln Val Glu Gln Leu Leu Tyr Glu Ser Pro Glu Arg Tyr Xaa  
 675 680 685  
 Arg Xaa  
 690

&lt;210&gt; 727

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 727

Thr Pro Pro Leu Val Ser Ser Val Ala Ala Leu Asp Ser His Arg Ser  
1 5 10 15

Thr Asn Pro Ile Val Asn Ser Ala Cys Lys Gly Ser Arg Leu Cys Ala  
20 25 30

Pro Tyr Glu Asn Leu Met Pro Asp Asp Leu Arg Xaa Asn Ser Phe Ile  
35 40 45

Leu Lys Pro Pro Phe Thr Leu Gln Ser Val Glu Lys Leu Ser Ser Thr  
50 55 60

Lys Leu Val Pro Gly Ala Lys Asn Xaa Gly Asp Arg Cys Ser Arg Glu  
65 70 75 80

Arg Ser

<210> 728

<211> 600

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (479)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (550)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (588)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

&lt;222&gt; (590)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 728

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Ser Arg Val Lys Pro Arg Val Arg Gly Thr Xaa Val Arg Thr Pro Gly
 1             5             10             15

Ser Arg Arg Gly Arg His Gly Ala Val Pro Gly Asp Trp Glu Ala Ala
      20             25             30

Ala Gln Ala Arg Gly Ala Gly Gln Arg Leu Pro Thr Pro Ser Glu Ile
      35             40             45

Leu Ser Asn Ala Gly Leu Arg Phe Glu Val Val Pro Ser Lys Phe Lys
      50             55             60

Glu Lys Leu Asp Lys Ala Ser Phe Ala Thr Pro Tyr Gly Tyr Ala Met
      65             70             75             80

Glu Thr Ala Lys Gln Lys Ala Leu Glu Val Ala Asn Arg Leu Tyr Gln
      85             90             95

Lys Asp Leu Arg Ala Pro Asp Val Val Ile Gly Ala Asp Thr Ile Val
      100            105            110

Thr Val Gly Gly Leu Ile Leu Glu Lys Pro Val Asp Lys Gln Asp Ala
      115            120            125

Tyr Arg Met Leu Ser Arg Leu Ser Gly Arg Glu His Ser Val Phe Thr
      130            135            140

Gly Val Ala Ile Val His Cys Ser Ser Lys Asp His Gln Leu Asp Thr
      145            150            155            160

Arg Val Ser Glu Phe Tyr Glu Glu Thr Lys Val Lys Phe Ser Glu Leu
      165            170            175

Ser Glu Glu Leu Leu Trp Glu Tyr Val His Ser Gly Glu Pro Met Asp
      180            185            190

Lys Ala Gly Gly Tyr Gly Ile Gln Ala Leu Gly Gly Met Leu Val Glu
      195            200            205

Ser Val His Gly Asp Phe Leu Asn Val Val Gly Phe Pro Leu Asn His
      210            215            220

Phe Cys Lys Gln Leu Val Lys Leu Tyr Tyr Pro Pro Arg Pro Glu Asp
      225            230            235            240

Leu Arg Arg Ser Val Lys His Asp Ser Ile Pro Ala Ala Asp Thr Phe
      245            250            255

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Glu Asp Leu Ser Asp Val Glu Gly Gly Gly Ser Glu Pro Thr Gln Arg  
 260 265 270  
 Asp Ala Gly Ser Arg Asp Glu Lys Ala Glu Ala Gly Glu Ala Gly Gln  
 275 280 285  
 Ala Thr Ala Glu Ala Glu Cys His Arg Thr Arg Glu Thr Leu Pro Pro  
 290 295 300  
 Phe Pro Thr Arg Leu Leu Glu Leu Ile Glu Gly Phe Met Leu Ser Lys  
 305 310 315 320  
 Gly Leu Leu Thr Ala Cys Lys Leu Lys Val Phe Asp Leu Leu Lys Asp  
 325 330 335  
 Glu Ala Pro Gln Lys Ala Ala Asp Ile Ala Ser Lys Val Asp Ala Ser  
 340 345 350  
 Ala Cys Gly Met Glu Arg Leu Leu Asp Ile Cys Ala Ala Met Gly Leu  
 355 360 365  
 Leu Glu Lys Thr Glu Gln Gly Tyr Ser Asn Thr Glu Thr Ala Asn Val  
 370 375 380  
 Tyr Leu Ala Ser Asp Gly Glu Tyr Ser Leu His Gly Phe Ile Met His  
 385 390 395 400  
 Asn Asn Asp Leu Thr Trp Asn Leu Phe Thr Tyr Leu Glu Phe Ala Ile  
 405 410 415  
 Arg Glu Gly Thr Asn Gln His His Arg Ala Leu Gly Lys Lys Ala Glu  
 420 425 430  
 Asp Leu Phe Gln Asp Ala Tyr Tyr Gln Ser Pro Glu Thr Arg Leu Arg  
 435 440 445  
 Phe Met Arg Ala Met His Gly Met Thr Lys Leu Thr Ala Cys Gln Val  
 450 455 460  
 Ala Thr Ala Phe Asn Leu Ser Arg Phe Ser Ser Ala Cys Asp Xaa Gly  
 465 470 475 480  
 Gly Cys Thr Gly Ala Leu Ala Arg Glu Leu Ala Arg Glu Tyr Pro Arg  
 485 490 495  
 Met Gln Val Thr Val Phe Asp Leu Pro Asp Ile Ile Glu Leu Ala Ala  
 500 505 510  
 His Phe Gln Pro Pro Gly Pro Gln Gln Cys Arg Ser Thr Ser Gln Gln  
 515 520 525

710

Val Thr Phe Ser Gly Thr Pro Ser Pro Ala Leu Ser Cys Thr Ser Cys  
 530 535 540

Ala Gly Ser Cys Met Xaa Gly Gln Thr Thr Lys Ser Thr Ser Tyr Ser  
 545 550 555 560

Ala Gly Ser Pro Arg Ala Ala Ser Gln Gly Pro Ala Cys Cys Trp Trp  
 565 570 575

Arg Arg Ser Trp Met Arg Arg Arg Gly Trp Arg Xaa Arg Xaa Asp Ala  
 580 585 590

Val Thr Glu His Ala Gly Ala Asp  
 595 600

<210> 729  
 <211> 535  
 <212> PRT  
 <213> Homo sapiens

<400> 729  
 Gly Arg Ser Ser Phe Thr Ser Leu Val Val Gly Val Phe Val Val Tyr  
 1 5 10 15

Val Val His Thr Cys Trp Val Met Tyr Gly Ile Val Tyr Thr Arg Pro  
 20 25 30

Cys Ser Gly Asp Ala Asn Cys Ile Gln Pro Tyr Leu Ala Arg Arg Pro  
 35 40 45

Lys Leu Gln Leu Ser Val Tyr Thr Thr Thr Arg Ser His Leu Gly Ala  
 50 55 60

Glu Asn Asn Ile Asp Leu Val Leu Asn Val Glu Asp Phe Asp Val Glu  
 65 70 75 80

Ser Lys Phe Glu Arg Thr Val Asn Val Ser Val Pro Lys Lys Thr Arg  
 85 90 95

Asn Asn Gly Thr Leu Tyr Ala Tyr Ile Phe Leu His His Ala Gly Val  
 100 105 110

Leu Pro Trp His Asp Gly Lys Gln Val His Leu Val Ser Pro Leu Thr  
 115 120 125

Thr Tyr Met Val Pro Lys Pro Glu Glu Ile Asn Leu Leu Thr Gly Glu  
 130 135 140

Ser Asp Thr Gln Gln Ile Glu Ala Glu Lys Lys Pro Thr Ser Ala Leu  
 145 150 155 160  
 Asp Glu Pro Val Ser His Trp Arg Pro Arg Leu Ala Leu Asn Val Met  
 165 170 175  
 Ala Asp Asn Phe Val Phe Asp Gly Ser Ser Leu Pro Ala Asp Val His  
 180 185 190  
 Arg Tyr Met Lys Met Ile Gln Leu Gly Lys Thr Val His Tyr Leu Pro  
 195 200 205  
 Ile Leu Phe Ile Asp Gln Leu Ser Asn Arg Val Lys Asp Leu Met Val  
 210 215 220  
 Ile Asn Arg Ser Thr Thr Glu Leu Pro Leu Thr Val Ser Tyr Asp Lys  
 225 230 235 240  
 Val Ser Leu Gly Arg Leu Arg Phe Trp Ile His Met Gln Asp Ala Val  
 245 250 255  
 Tyr Ser Leu Gln Gln Phe Gly Phe Ser Glu Lys Asp Ala Asp Glu Val  
 260 265 270  
 Lys Gly Ile Phe Val Asp Thr Asn Leu Tyr Phe Leu Ala Leu Thr Phe  
 275 280 285  
 Phe Val Ala Ala Phe His Leu Leu Phe Asp Phe Leu Ala Phe Lys Asn  
 290 295 300  
 Asp Ile Ser Phe Trp Lys Lys Lys Lys Ser Met Ile Gly Met Ser Thr  
 305 310 315 320  
 Lys Ala Val Leu Trp Arg Cys Phe Ser Thr Val Val Ile Phe Leu Phe  
 325 330 335  
 Leu Leu Asp Glu Gln Thr Ser Leu Leu Val Leu Val Pro Ala Gly Val  
 340 345 350  
 Gly Ala Ala Ile Glu Leu Trp Lys Val Lys Lys Ala Leu Lys Met Thr  
 355 360 365  
 Ile Phe Trp Arg Gly Leu Met Pro Glu Phe Gln Phe Gly Thr Tyr Ser  
 370 375 380  
 Glu Ser Glu Arg Lys Thr Glu Glu Tyr Asp Thr Gln Ala Met Lys Tyr  
 385 390 395 400  
 Leu Ser Tyr Leu Leu Tyr Pro Leu Cys Val Gly Gly Ala Val Tyr Ser  
 405 410 415

712

Leu Leu Asn Ile Lys Tyr Lys Ser Trp Tyr Ser Trp Leu Ile Asn Ser  
 420 425 430

Phe Val Asn Gly Val Tyr Ala Phe Gly Phe Leu Phe Met Leu Pro Gln  
 435 440 445

Leu Phe Val Asn Tyr Lys Leu Lys Ser Val Ala His Leu Pro Trp Lys  
 450 455 460

Ala Phe Thr Tyr Lys Ala Phe Asn Thr Phe Ile Asp Asp Val Phe Ala  
 465 470 475 480

Phe Ile Ile Thr Met Pro Thr Ser His Arg Leu Ala Cys Phe Arg Asp  
 485 490 495

Asp Val Val Phe Leu Val Tyr Leu Tyr Gln Arg Trp Leu Tyr Pro Val  
 500 505 510

Asp Lys Arg Arg Val Asn Glu Phe Gly Glu Ser Tyr Glu Glu Lys Ala  
 515 520 525

Thr Arg Ala Pro His Thr Asp  
 530 535

&lt;210&gt; 730

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 730

Arg Pro Ala Gly Val Thr Glu Leu Gln Pro Arg Ala Pro Gly Gly Gly  
 1 5 10 15

Gly Met Glu Ala Ala Ala Glu Pro Gly Asn Leu Ala Gly Val Arg His  
 20 25 30

Ile Ile Leu Val Leu Ser Gly Lys Gly Gly Val Gly Lys Ser Thr Ile  
 35 40 45

Ser Thr Glu Leu Ala Leu Ala Leu Arg His Ala Gly Lys Lys Val Gly  
 50 55 60

Ile Leu Asp Val Asp Leu Cys Gly Pro Ser Ile Pro Arg Met Leu Gly  
 65 70 75 80

Ala Gln Gly Arg Ala Val His Gln Cys Asp Arg Gly Trp Ala Pro Val  
 85 90 95

Phe Leu Asp Arg Glu Gln Ser Ile Ser Leu Met Ser Val Gly Phe Leu

713

100	105	110
Leu Glu Lys Pro Asp Glu Ala Val Val Trp Arg Gly Pro Lys Lys Asn		
115	120	125
Ala Leu Ile Lys Gln Phe Val Ser Asp Val Ala Trp Gly Glu Leu Asp		
130	135	140
Tyr Leu Val Val Asp Thr Pro Pro Gly Thr Ser Asp Glu His Met Ala		
145	150	155
160		
Thr Ile Glu Ala Leu Arg Pro Tyr Gln Pro Leu Gly Ala Leu Val Val		
165	170	175
Thr Thr Pro Gln Ala Val Ser Val Gly Asp Val Arg Arg Glu Leu Thr		
180	185	190
Phe Cys Arg Lys Thr Gly Leu Arg Val Met Gly Ile Val Glu Asn Met		
195	200	205
Ser Gly Phe Thr Cys Pro His Cys Thr Glu Cys Thr Ser Val Phe Ser		
210	215	220
Arg Gly Gly Gly Glu Glu Leu Ala Gln Leu Ala Gly Val Pro Phe Leu		
225	230	235
240		
Gly Ser Val Pro Leu Asp Pro Ala Leu Met Arg Thr Leu Glu Glu Gly		
245	250	255
His Asp Phe Ile Gln Glu Phe Pro Gly Ser Pro Ala Phe Ala Ala Leu		
260	265	270
Thr Ser Ile Ala Gln Lys Ile Leu Asp Ala Thr Pro Ala Cys Leu Pro		
275	280	285

&lt;210&gt; 731

&lt;211&gt; 737

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 731

Asp Gln Leu Cys Gly Pro Gln Thr Tyr Lys Glu His Leu Glu Gly Gln
1 5 10 15
Lys His Lys Lys Lys Glu Ala Ala Leu Lys Ala Ser Gln Asn Thr Ser
20 25 30

714

Ser Ser Asn Ser Ser Thr Arg Gly Thr Gln Asn Gln Leu Arg Cys Glu  
 35 40 45  
 Leu Cys Asp Val Ser Cys Thr Gly Ala Asp Ala Tyr Ala Ala His Ile  
 50 55 60  
 Arg Gly Ala Lys His Gln Lys Val Val Lys Leu His Thr Lys Leu Gly  
 65 70 75 80  
 Lys Pro Ile Pro Ser Thr Glu Pro Asn Val Val Ser Gln Ala Thr Ser  
 85 90 95  
 Ser Thr Ala Val Ser Ala Ser Lys Pro Thr Ala Ser Pro Ser Ser Ile  
 100 105 110  
 Ala Ala Asn Asn Cys Thr Val Asn Thr Ser Ser Ile Ala Thr Ser Ser  
 115 120 125  
 Met Lys Gly Leu Thr Thr Thr Gly Asn Ser Ser Leu Asn Ser Thr Ser  
 130 135 140  
 Asn Thr Lys Val Ser Ala Val Pro Thr Asn Met Ala Ala Lys Lys Thr  
 145 150 155 160  
 Ser Thr Pro Lys Ile Asn Phe Val Gly Gly Asn Lys Leu Gln Ser Thr  
 165 170 175  
 Gly Asn Lys Ala Glu Asp Thr Lys Gly Thr Glu Cys Val Lys Ser Thr  
 180 185 190  
 Pro Val Thr Ser Ala Val Gln Ile Pro Glu Val Lys Gln Asp Thr Val  
 195 200 205  
 Ser Glu Pro Val Thr Pro Ala Ser Leu Ala Ala Leu Gln Ser Asp Val  
 210 215 220  
 Gln Pro Val Gly His Asp Tyr Val Glu Glu Val Arg Asn Asp Glu Gly  
 225 230 235 240  
 Lys Val Ile Arg Phe His Cys Lys Leu Cys Glu Cys Ser Phe Asn Asp  
 245 250 255  
 Pro Asn Ala Lys Glu Met His Leu Lys Gly Arg Arg His Arg Leu Gln  
 260 265 270  
 Tyr Lys Lys Lys Val Asn Pro Asp Leu Gln Val Glu Val Lys Pro Ser  
 275 280 285  
 Ile Arg Ala Arg Lys Ile Gln Glu Glu Lys Met Arg Lys Gln Met Gln  
 290 295 300

715

Lys Glu Glu Tyr Trp Arg Arg Arg Glu Glu Glu Glu Arg Trp Arg Met  
 305 310 315 320  
 Glu Met Arg Arg Tyr Glu Glu Asp Met Tyr Trp Arg Arg Met Glu Glu  
 325 330 335  
 Glu Gln His His Trp Asp Asp Arg Arg Arg Met Pro Asp Gly Gly Tyr  
 340 345 350  
 Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly  
 355 360 365  
 Met Pro Pro Gln Pro Gln Gly Pro Ala Pro Leu Arg Arg Pro Asp Ser  
 370 375 380  
 Ser Asp Asp Arg Tyr Val Met Thr Lys His Ala Thr Ile Tyr Pro Thr  
 385 390 395 400  
 Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val Ser Ile Thr Glu Arg  
 405 410 415  
 Ala Leu Lys Leu Val Ser Asp Ser Leu Ser Glu His Glu Lys Asn Lys  
 420 425 430  
 Asn Lys Glu Gly Asp Asp Lys Lys Glu Gly Gly Lys Asp Arg Ala Leu  
 435 440 445  
 Lys Gly Val Leu Arg Val Gly Val Leu Ala Lys Gly Leu Leu Leu Arg  
 450 455 460  
 Gly Asp Arg Asn Val Asn Leu Val Leu Leu Cys Ser Glu Lys Pro Ser  
 465 470 475 480  
 Lys Thr Leu Leu Ser Arg Ile Ala Glu Asn Leu Pro Lys Gln Leu Ala  
 485 490 495  
 Val Ile Ser Pro Glu Lys Tyr Asp Ile Lys Cys Ala Val Ser Glu Ala  
 500 505 510  
 Ala Ile Ile Leu Asn Ser Cys Val Glu Pro Lys Met Gln Val Thr Ile  
 515 520 525  
 Thr Leu Thr Ser Pro Ile Ile Arg Glu Glu Asn Met Arg Glu Gly Asp  
 530 535 540  
 Val Thr Ser Gly Met Val Lys Asp Pro Pro Asp Val Leu Asp Arg Gln  
 545 550 555 560  
 Lys Cys Leu Asp Ala Leu Ala Ala Leu Arg His Ala Lys Trp Phe Gln  
 565 570 575

716

Ala Arg Ala Asn Gly Leu Gln Ser Cys Val Ile Ile Ile Arg Ile Leu  
                   580                  585                  590  
 Arg Asp Leu Cys Gln Arg Val Pro Thr Trp Ser Asp Phe Pro Ser Trp  
                   595                  600                  605  
 Ala Met Glu Leu Leu Val Glu Lys Ala Ile Ser Ser Ala Ser Ser Pro  
                   610                  615                  620  
 Gln Ser Pro Gly Asp Ala Leu Arg Arg Val Phe Glu Cys Ile Ser Ser  
                   625                  630                  635                  640  
 Gly Ile Ile Leu Lys Gly Ser Pro Gly Leu Leu Asp Pro Cys Glu Lys  
                   645                  650                  655  
 Asp Pro Phe Asp Thr Leu Ala Thr Met Thr Asp Gln Gln Arg Glu Asp  
                   660                  665                  670  
 Ile Thr Ser Ser Ala Gln Phe Ala Leu Arg Leu Leu Ala Phe Arg Gln  
                   675                  680                  685  
 Ile His Lys Val Leu Gly Met Asp Pro Leu Pro Gln Met Ser Gln Arg  
                   690                  695                  700  
 Phe Asn Ile His Asn Asn Arg Lys Arg Arg Arg Asp Ser Asp Gly Val  
                   705                  710                  715                  720  
 Asp Gly Phe Glu Ala Glu Gly Lys Lys Asp Lys Lys Asp Tyr Asp Asn  
                   725                  730                  735

Phe

&lt;210&gt; 732

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 732

Gly Arg Gly Leu Asn Ser Pro Lys Glu Leu Arg Pro Leu Thr Arg Ala  
   1                  5                  10                  15  
 Ala Pro Ala Ala Ala Ala Cys Thr Gly Pro Gly Ala Ala Met Pro Lys  
                   20                  25                  30  
 Cys Pro Lys Cys Asn Lys Glu Val Tyr Phe Ala Glu Arg Val Thr Ser  
                   35                  40                  45



717

Leu Gly Lys Asp Trp His Arg Pro Cys Leu Lys Cys Glu Lys Cys Gly  
 50 55 60

Lys Thr Leu Thr Ser Gly Gly His Ala Glu His Glu Gly Lys Pro Tyr  
 65 70 75 80

Cys Asn His Pro Cys Tyr Ala Ala Met Phe Gly Pro Lys Gly Phe Gly  
 85 90 95

Arg Gly Gly Ala Glu Ser His Thr Phe Lys  
 100 105

&lt;210&gt; 733

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 733

Ala Ser Cys Leu Gln Ser Val Ala Ser Ala Cys Ala Ser Phe Pro Ala  
 1 5 10 15

Pro Ser Trp Arg Gly Thr Arg Lys Arg Asn Ala Thr Asp Arg Val Thr  
 20 25 30

Gln Cys Lys Tyr Lys Arg Ile Gly Cys Pro Trp His Gly Pro Phe His  
 35 40 45

Glu Leu Thr Val His Glu Ala Ala Cys Ala His Pro Thr Lys Thr Gly  
 50 55 60

Ser Glu Leu Met Glu Ile Leu Asp Gly Met Asp Gln Ser His Arg Lys  
 65 70 75 80

Glu Met Gln Leu Tyr Asn Ser Ile Phe Ser Leu Leu Ser Phe Glu Lys  
 85 90 95

Ile Gly Tyr Thr Glu Val Gln Phe Arg Pro Tyr Arg Thr Asp Asp Phe  
 100 105 110

Ile Thr Arg Leu Tyr Tyr Glu Thr Pro Arg Phe Thr Val Leu Asn Gln  
 115 120 125

Thr Trp Val Leu Lys Ala Arg Val Asn Asp Ser Glu Arg Asn Pro Asn  
 130 135 140

Leu Ser Cys Lys Arg Thr Leu Ser Phe Gln Leu Leu Lys Ser Lys  
 145 150 155 160

Val Thr Ala Pro Leu Glu Cys Ser Phe Leu Leu Lys Gly Pro Tyr

718

165 170 175  
 Asp Asp Val Arg Ile Ser Pro Val Ile Tyr His Phe Val Phe Thr Asn  
 180 185 190  
 Glu Ser Asn Glu Thr Asp Tyr Val Pro Leu Pro Ile Ile Asp Ser Val  
 195 200 205  
 Glu Cys Asn Lys Leu Leu Ala Ala Lys Asn Ile Asn Leu Arg Leu Phe  
 210 215 220  
 Leu Phe Gln Ile Gln Lys  
 225 230

<210> 734  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (18)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 734  
 Gly Arg Pro Ala Pro Pro Ala Ala Arg Ala Gly Ala His Ser Arg Gly  
 1 5 10 15  
 Ala Xaa Ala Pro Pro Ala Ala Ile Asp Met Met Phe Pro Gln Ser Arg  
 20 25 30  
 His Ser Gly Ser Ser His Leu Pro Gln Gln Leu Lys Phe Thr Thr Ser  
 35 40 45  
 Asp Ser Cys Asp Arg Ile Lys Asp Glu Phe Gln Leu Leu Gln Ala Gln  
 50 55 60  
 Tyr His Ser Leu Lys Leu Glu Cys Asp Lys Leu Ala Ser Glu Lys Ser  
 65 70 75 80  
 Glu Met Gln Arg His Tyr Val Met Tyr Tyr Glu Met Ser Tyr Gly Leu  
 85 90 95  
 Asn Ile Glu Met His Lys Gln Ala Glu Ile Val Lys Arg Leu Asn Gly  
 100 105 110  
 Ile Cys Ala Gln Val Leu Pro Tyr Leu Ser Gln Glu His Gln Gln Gln  
 115 120 125

719

Val Leu Gly Ala Ile Glu Arg Ala Lys Gln Val Thr Ala Pro Glu Leu  
 130 135 140

Asn Ser Ile Ile Arg Gln Gln Leu Gln Ala His Gln Leu Ser Gln Leu  
 145 150 155 160

Gln Ala Leu Ala Leu Pro Leu Thr Pro Leu Pro Val Gly Leu Gln Pro  
 165 170 175

Pro Ser Leu Pro Ala Val Ser Ala Gly Thr Gly Leu Leu Ser Leu Ser  
 180 185 190

Ala Leu Gly Ser Gln Ala His Leu Ser Lys Glu Asp Lys Asn Gly His  
 195 200 205

Asp Gly Asp Thr His Gln Glu Asp Asp Gly Glu Lys Ser Asp  
 210 215 220

<210> 735  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 735  
 Gly Thr Ser Asp Met Glu Leu Phe Leu Ala Gly Arg Arg Val Leu Val  
 1 5 10 15

Thr Gly Ala Gly Lys Gly Ile Gly Arg Gly Thr Val Gln Ala Leu His  
 20 25 30

Ala Thr Gly Ala Arg Val Val Ala Val Ser Arg Thr Gln Ala Asp Leu  
 35 40 45

Asp Ser Leu Val Arg Glu Cys Pro Gly Ile Glu Pro Val Cys Val Asp  
 50 55 60

Leu Gly Asp Trp Glu Ala Thr Glu Arg Ala Leu Gly Ser Val Gly Pro  
 65 70 75 80

Val Asp Leu Leu Val Asn Asn Ala Ala Val Ala Leu Leu Gln Pro Phe  
 85 90 95

Leu Glu Val Thr Lys Glu Ala Phe Asp Arg Ser Phe Glu Val Asn Leu  
 100 105 110

Arg Ala Val Ile Gln Val Ser Gln Ile Val Ala Arg Gly Leu Ile Ala  
 115 120 125

Arg Gly Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln

720

130                      135                      140  
 Arg Ala Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu  
 145                      150                      155                      160  
 Asp Met Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile  
                     165                      170                      175  
 Arg Val Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln  
                     180                      185                      190  
 Ala Thr Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile  
                     195                      200                      205  
 Pro Leu Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu  
                     210                      215                      220  
 Phe Leu Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro  
 225                      230                      235                      240  
 Val Glu Gly Gly Phe Trp Ala Cys  
                     245

&lt;210&gt; 736

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 736

Arg Leu Leu Phe Arg Val Arg Lys Arg Met Ile Ser Phe Ser Ala Pro  
 1                      5                      10                      15

Pro Leu Met Leu Pro Phe Ser Phe Tyr Phe Phe Val Phe Pro Val Ala  
                     20                      25                      30

Arg Thr Ala Arg Lys Arg Lys Pro Ser Pro Glu Pro Glu Gly Glu Val  
                     35                      40                      45

Gly Pro Pro Lys Ile Asn Gly Glu Ala Gln Pro Trp Xaa Ser Thr Ser

721

50                      55                      60  
 Thr Glu Gly Xaa Lys Ile Pro Met Thr Pro Thr Ser Ser Phe Val Ser  
 65                      70                      75                      80  
 Pro Pro Pro Pro Thr Ala Ser Pro His Ser Asn Arg Thr Thr Pro Pro  
 85                      90                      95  
 Glu Ala Ala Gln Asn Gly Gln Ser Pro Met Ala Ala Leu Ile Leu Val  
 100                      105                      110  
 Ala Asp Asn Ala Gly Gly Ser His Ala Ser Lys Asp Ala Asn Gln Val  
 115                      120                      125  
 His Ser Thr Thr Arg Arg Asn Ser Asn Ser Pro Pro Ser Pro Ser Ser  
 130                      135                      140  
 Met Asn Gln Arg Arg Leu Gly Pro Arg Glu Val Gly Gly Gln Gly Ala  
 145                      150                      155                      160  
 Gly Asn Thr Gly Gly Leu Glu Pro Val His Pro Ala Ser Leu Pro Asp  
 165                      170                      175  
 Phe Ser Leu Ala Thr Ser Ala Pro Leu Cys Cys Thr Leu Cys His Glu  
 180                      185                      190  
 Arg Leu Glu Asp Asn His Phe Val Gln Cys Arg Pro Ser Phe Asp Lys  
 195                      200                      205  
 Phe Ser Ser Leu Leu Arg Gln Arg  
 210                      215  
  
 <210> 737  
 <211> 317  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 737  
 Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Ser  
 1                      5                      10                      15  
 Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu Thr Ser Leu  
 20                      25                      30  
 Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Phe Leu Glu  
 35                      40                      45  
 Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro Val Glu Lys  
 50                      55                      60

Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr Cys Gln Phe  
 65 70 75 80  
 Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp Lys Lys Gly  
 85 90 95  
 Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu Gly Ile Leu  
 100 105 110  
 Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln Leu Gly Ser  
 115 120 125  
 Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly Thr Phe Asn  
 130 135 140  
 Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu Ile Thr Tyr  
 145 150 155 160  
 Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His Cys Ala Pro  
 165 170 175  
 Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln Val Pro Leu  
 180 185 190  
 Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr Asn Ala Asn  
 195 200 205  
 Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp Lys Gly Ser  
 210 215 220  
 Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln Glu Ser Val  
 225 230 235 240  
 Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro Phe Leu Gly  
 245 250 255  
 Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu Phe Cys Glu  
 260 265 270  
 Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly Lys Glu Phe  
 275 280 285  
 Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly Ile Glu Asn  
 290 295 300  
 Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln  
 305 310 315

723

<210> 738  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 738  
 Ala Arg Val Ala Ser Asp Pro Phe Phe Arg His Tyr Arg Gln Leu Asn  
 1 5 10 15  
 Glu Lys Leu Val Gln Leu Ile Glu Asp Tyr Ser Leu Val Ser Phe Ile  
 20 25 30  
 Pro Leu Asn Ile Gln Asp Lys Glu Ser Ile Gln Arg Val Leu Gln Ala  
 35 40 45  
 Val Asp Lys Ala Asn Gly Tyr Cys Phe Gly Ala Gln Glu Gln Arg Thr  
 50 55 60  
 Trp Lys Pro  
 65

<210> 739  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 739  
 Ser Gln Gln Pro Arg Ile Met Ser Lys Leu Gly Arg Ala Ala Arg Gly  
 1 5 10 15  
 Leu Arg Lys Pro Glu Val Gly Gly Val Ile Arg Ala Ile Val Arg Ala  
 20 25 30  
 Gly Leu Ala Met Pro Gly Pro Pro Leu Gly Pro Val Leu Gly Gln Arg  
 35 40 45  
 Gly Val Ser Ile Asn Gln Phe Cys Lys Glu Phe Asn Glu Arg Thr Lys  
 50 55 60  
 Asp Ile Lys Glu Gly Ile Pro Leu Pro Thr Lys Ile Leu Val Lys Pro  
 65 70 75 80  
 Asp Arg Thr Phe Glu Ile Lys Ile Gly Gln Pro Thr Val Ser Tyr Phe  
 85 90 95  
 Leu Lys Ala Ala Ala Gly Ile Glu Lys Gly Ala Arg Gln Thr Gly Lys  
 100 105 110  
 Glu Val Ala Gly Leu Val Thr Leu Lys His Val Tyr Glu Ile Ala Arg

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<210> 740
<211> 485
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 740
Trp Pro Ala Val Ala Val Arg Phe Thr Ala Leu Xaa Leu Gly Phe Gly
  1                      5                      10                      15
Asp Ala Val His Val Tyr Asp Gly Pro Gly Pro Pro Glu Ser Ser Arg
      20                      25                      30
Leu Leu Arg Ser Leu Thr His Phe Ser Asn Gly Lys Ala Val Thr Val
      35                      40                      45
Glu Thr Leu Ser Gly Gln Ala Val Val Ser Tyr His Thr Val Ala Trp
      50                      55                      60
Ser Asn Gly Arg Gly Phe Asn Ala Thr Tyr His Val Arg Gly Tyr Cys
      65                      70                      75                      80
Leu Pro Trp Asp Arg Pro Cys Gly Leu Gly Ser Gly Leu Gly Ala Gly
      85                      90                      95
Glu Gly Leu Gly Glu Arg Cys Tyr Ser Glu Ala Gln Arg Cys Asp Gly
      100                      105                      110
Ser Trp Asp Cys Ala Asp Gly Thr Asp Glu Glu Asp Cys Pro Gly Cys
      115                      120                      125
Pro Pro Gly His Phe Pro Cys Gly Ala Ala Gly Thr Ser Gly Ala Thr
      130                      135                      140
Ala Cys Tyr Leu Pro Ala Asp Arg Cys Asn Tyr Gln Thr Phe Cys Ala
      145                      150                      155                      160
sp Gly Ala Asp Glu Arg Arg Cys Arg His Cys Gln Pro Gly Asn Phe
      165                      170                      175

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Arg Cys Arg Asp Glu Lys Cys Val Tyr Glu Thr Trp Val Cys Asp Gly  
 180 185 190  
 Gln Pro Asp Cys Ala Asp Gly Ser Asp Glu Trp Asp Cys Ser Tyr Val  
 195 200 205  
 Leu Pro Arg Lys Val Ile Thr Ala Ala Val Ile Gly Ser Leu Val Cys  
 210 215 220  
 Gly Leu Leu Leu Val Ile Ala Leu Gly Cys Thr Cys Lys Leu Tyr Ala  
 225 230 235 240  
 Ile Arg Thr Gln Glu Tyr Ser Ile Phe Ala Pro Leu Ser Arg Met Glu  
 245 250 255  
 Ala Glu Ile Val Gln Gln Gln Ala Pro Pro Ser Tyr Gly Gln Leu Ile  
 260 265 270  
 Ala Gln Gly Ala Ile Pro Pro Val Glu Asp Phe Pro Thr Glu Asn Pro  
 275 280 285  
 Asn Asp Asn Ser Val Leu Gly Asn Leu Arg Ser Leu Leu Gln Ile Leu  
 290 295 300  
 Arg Gln Asp Met Thr Pro Gly Gly Gly Pro Gly Ala Arg Arg Arg Gln  
 305 310 315 320  
 Arg Gly Arg Leu Met Arg Arg Leu Val Arg Arg Leu Arg Arg Trp Gly  
 325 330 335  
 Leu Leu Pro Arg Thr Asn Thr Pro Ala Arg Ala Ser Glu Ala Arg Ser  
 340 345 350  
 Gln Val Thr Pro Ser Ala Ala Pro Leu Glu Ala Leu Asp Gly Gly Thr  
 355 360 365  
 Gly Pro Ala Arg Glu Gly Gly Ala Val Gly Gly Gln Asp Gly Glu Gln  
 370 375 380  
 Ala Pro Pro Leu Pro Ile Lys Ala Pro Leu Pro Ser Ala Ser Thr Ser  
 385 390 395 400  
 Pro Ala Pro Thr Thr Val Pro Glu Ala Pro Gly Pro Leu Pro Ser Leu  
 405 410 415  
 Pro Leu Glu Pro Ser Leu Leu Ser Gly Val Val Gln Ala Leu Arg Gly  
 420 425 430  
 Arg Leu Leu Pro Ser Leu Gly Pro Pro Gly Pro Thr Arg Ser Pro Pro  
 435 440 445

726

Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu Asp Asp Val Leu  
 450 455 460

Leu Val Pro Leu Ala Glu Pro Gly Val Trp Val Ala Glu Ala Glu Asp  
 465 470 475 480

Glu Pro Leu Leu Thr  
 485

<210> 741  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (36)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (276)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 741  
 Gly Gly Ala Arg Gly Xaa Xaa Arg Xaa Val Ala Ser Phe Gln Gln Gln  
 1 5 10 15

His Gly Ala Gln Arg Asp Leu Lys Leu Gly Ser Arg Leu Tyr Gly Pro  
 20 25 30

Ser Ser Val Xaa Phe Ala Glu Asp Phe Val Arg Ser Ser Lys Gln His  
 35 40 45

727

Tyr Asn Cys Glu His Ser Lys Ile Asn Phe Arg Asp Lys Arg Ser Ala  
 50 55 60  
 Leu Gln Ser Ile Asn Glu Trp Ala Ala Gln Thr Thr Asp Gly Lys Leu  
 65 70 75 80  
 Pro Glu Val Thr Lys Asp Val Glu Arg Thr Asp Gly Ala Leu Leu Val  
 85 90 95  
 Asn Ala Met Phe Phe Lys Pro His Trp Asp Glu Lys Phe His His Lys  
 100 105 110  
 Met Val Asp Asn Arg Gly Phe Met Val Thr Arg Ser Tyr Thr Val Gly  
 115 120 125  
 Val Thr Met Met His Arg Thr Gly Leu Tyr Asn Tyr Tyr Asp Asp Glu  
 130 135 140  
 Lys Glu Lys Leu Gln Met Val Glu Met Pro Leu Ala His Lys Leu Ser  
 145 150 155 160  
 Ser Leu Leu Ile Leu Met Pro His His Val Glu Pro Leu Glu Arg Leu  
 165 170 175  
 Glu Lys Leu Leu Thr Lys Glu Gln Leu Lys Ile Trp Met Gly Lys Met  
 180 185 190  
 Gln Lys Lys Ala Val Ala Ile Ser Leu Pro Lys Gly Val Val Glu Val  
 195 200 205  
 Thr His Asp Leu Gln Lys His Leu Ala Gly Leu Gly Leu Thr Glu Ala  
 210 215 220  
 Ile Asp Lys Asn Lys Ala Asp Leu Ser Arg Met Ser Gly Lys Lys Asp  
 225 230 235 240  
 Leu Tyr Leu Ala Ser Val Phe His Ala Thr Ala Phe Glu Trp Asp Thr  
 245 250 255  
 Glu Gly Asn Pro Phe Asp Gln Asp Ile Tyr Gly Arg Glu Glu Leu Arg  
 260 265 270  
 Ser Pro Lys Xaa Phe Tyr Ala Asp His Pro Phe Ile Phe Leu Val Arg  
 275 280 285  
 Asp Thr Gln Thr Gly Ser Leu Leu Phe Ile Gly Arg Leu Val Arg Pro  
 290 295 300  
 Lys Gly Asp Lys Met Arg Asp Glu Leu  
 305 310

728

<210> 742  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 742  
 Arg Asn Ile Lys Trp Glu Lys Ala Tyr Lys Ala Phe Arg Ile Leu Ser  
 1 5 10 15  
 Val Ser Ser Phe Leu Val Phe Arg Cys Tyr Val Ile Lys His Ile Phe  
 20 25 30  
 Phe Gly Phe Pro Arg Tyr Thr Ile Tyr Leu Phe Lys Gly Lys Ser Ile  
 35 40 45  
 Lys Cys Ile Tyr Phe Ile Leu Trp Phe Cys Tyr Leu  
 50 55 60

<210> 743  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 743  
 Pro Arg Gly Xaa Ser Gln Val Cys Pro Cys Ser Trp Asn Pro Gly Val  
 1 5 10 15  
 Pro Glu Ala Lys Ala Pro Pro Arg Gly Ser Arg Glu Asp Leu Val Ala  
 20 25 30  
 Glu Glu Ser Pro Glu Leu Leu Asn Pro Glu Pro Arg Arg Leu Ser Pro  
 35 40 45  
 Glu Leu Arg Leu Leu Pro Tyr Met Ile Thr Leu Gly Asp Ala Val His  
 50 55 60  
 Asn Phe Ala Asp Gly Leu Ala Val Gly Ala Ala Phe Ala Ser Ser Trp  
 65 70 75 80  
 Lys Thr Gly Leu Ala Thr Ser Leu Ala Val Phe Cys His Glu Leu Pro  
 85 90 95

729

His Glu Leu Gly Asp Phe Ala Ala Leu Leu His Ala Gly Leu Ser Val  
                   100                                  105                                  110  
 Arg Gln Ala Leu Leu Leu Asn Leu Ala Ser Ala Leu Thr Ala Phe Ala  
                   115                                  120                                  125  
 Gly Leu Tyr Val Ala Leu Ala Val Gly Val Ser Glu Glu Ser Glu Ala  
                   130                                  135                                  140  
 Trp Ile Leu Ala Val Ala Thr Gly Leu Phe Leu Tyr Val Ala Leu Cys  
                   145                                  150                                  155                                  160  
 Asp Met Leu Pro Ala Met Leu Lys Val Arg Asp Pro Arg Pro Trp Leu  
                                   165                                  170                                  175  
 Leu Phe Leu Leu His Asn Val Gly Leu Leu Gly Gly Trp Thr Val Leu  
                                   180                                  185                                  190  
 Leu Leu Leu Ser Leu Tyr Glu Asp Asp Ile Thr Phe  
                                   195                                  200

&lt;210&gt; 744

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 744

Ile Thr Lys Gly Lys Xaa Val Ala Cys Ser Thr Gly Pro Glu Phe Pro  
           1                                  5                                  10                                  15  
 Gly Arg Pro Thr Arg Pro Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr  
                   20                                  25                                  30  
 Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly Cys Glu  
                   35                                  40                                  45  
 Lys Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly  
                   50                                  55                                  60  
 Cys Glu Lys Thr Thr Glu Gly Thr Ala Ala Arg Arg Arg Gln Arg Val  
                   65                                  70                                  75                                  80  
 Arg

730

&lt;210&gt; 745

&lt;211&gt; 751

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 745

Leu Pro Pro Leu Gly Ser Pro Gly Pro Ala Arg Ser Ala Gly Ser Cys  
 1 5 10 15  
 Ser Val Leu Phe Ser Leu Ile Leu Gln Arg Gln Asp Pro Ala Pro Ala  
 20 25 30  
 Leu Ser Thr Ala Thr Met Gly Lys Gly Val Gly Arg Asp Lys Tyr Glu  
 35 40 45  
 Pro Ala Ala Val Ser Glu Gln Gly Asp Lys Lys Gly Lys Lys Gly Lys  
 50 55 60  
 Lys Asp Arg Asp Met Asp Glu Leu Lys Lys Glu Val Ser Met Asp Asp  
 65 70 75 80  
 His Lys Leu Ser Leu Asp Glu Leu His Arg Lys Tyr Gly Thr Asp Leu  
 85 90 95  
 Ser Arg Gly Leu Thr Ser Ala Arg Ala Ala Glu Ile Leu Ala Arg Asp  
 100 105 110  
 Gly Pro Asn Ala Leu Thr Pro Pro Pro Thr Thr Pro Glu Trp Ile Lys  
 115 120 125  
 Phe Cys Arg Gln Leu Phe Gly Gly Phe Ser Met Leu Leu Trp Ile Gly  
 130 135 140  
 Ala Ile Leu Cys Phe Leu Ala Tyr Ser Ile Gln Ala Ala Thr Glu Glu  
 145 150 155 160  
 Glu Pro Gln Asn Asp Asn Leu Tyr Leu Gly Val Val Leu Ser Ala Val  
 165 170 175  
 Val Ile Ile Thr Gly Cys Phe Ser Tyr Tyr Gln Glu Ala Lys Ser Ser  
 180 185 190  
 Lys Ile Met Glu Ser Phe Lys Asn Met Val Pro Gln Gln Ala Leu Val  
 195 200 205  
 Ile Arg Asn Gly Glu Lys Met Ser Ile Asn Ala Glu Glu Val Val Val  
 210 215 220

731

Gly Asp Leu Val Glu Val Lys Gly Gly Asp Arg Ile Pro Ala Asp Leu  
 225 230 235 240  
 Arg Ile Ile Ser Ala Asn Gly Cys Lys Val Asp Asn Ser Ser Leu Thr  
 245 250 255  
 Gly Glu Ser Glu Pro Gln Thr Arg Ser Pro Asp Phe Thr Asn Glu Asn  
 260 265 270  
 Pro Leu Glu Thr Arg Asn Ile Ala Phe Phe Ser Thr Asn Cys Val Glu  
 275 280 285  
 Gly Thr Ala Arg Gly Ile Val Val Tyr Thr Gly Asp Arg Thr Val Met  
 290 295 300  
 Gly Arg Ile Ala Thr Leu Ala Ser Gly Leu Glu Gly Gly Gln Thr Pro  
 305 310 315 320  
 Ile Ala Ala Glu Ile Glu His Phe Ile His Ile Ile Thr Gly Val Ala  
 325 330 335  
 Val Phe Leu Gly Val Ser Phe Phe Ile Leu Ser Leu Ile Leu Glu Tyr  
 340 345 350  
 Thr Trp Leu Glu Ala Val Ile Phe Leu Ile Gly Ile Ile Val Ala Asn  
 355 360 365  
 Val Pro Glu Gly Leu Leu Ala Thr Val Thr Val Cys Leu Thr Leu Thr  
 370 375 380  
 Ala Lys Arg Met Ala Arg Lys Asn Cys Leu Val Lys Asn Leu Glu Ala  
 385 390 395 400  
 Val Glu Thr Leu Gly Ser Thr Ser Thr Ile Cys Ser Asp Lys Thr Gly  
 405 410 415  
 Thr Leu Thr Gln Asn Arg Met Thr Val Ala His Met Trp Phe Asp Asn  
 420 425 430  
 Gln Ile His Glu Ala Asp Thr Thr Glu Asn Gln Ser Gly Val Ser Phe  
 435 440 445  
 Asp Lys Thr Ser Ala Thr Trp Leu Ala Leu Ser Arg Ile Ala Gly Leu  
 450 455 460  
 Cys Asn Arg Ala Val Phe Gln Ala Asn Gln Glu Asn Leu Pro Ile Leu  
 465 470 475 480  
 Lys Arg Ala Val Ala Gly Asp Ala Ser Glu Ser Ala Leu Leu Lys Cys  
 485 490 495

732

Ile Glu Leu Cys Cys Gly Ser Val Lys Glu Met Arg Glu Arg Tyr Ala  
 500 505 510  
 Lys Ile Val Glu Ile Pro Phe Asn Ser Thr Asn Lys Tyr Gln Leu Ser  
 515 520 525  
 Ile His Lys Asn Pro Asn Thr Ser Glu Pro Gln His Leu Leu Val Met  
 530 535 540  
 Lys Gly Ala Pro Glu Arg Ile Leu Asp Arg Cys Ser Ser Ile Leu Leu  
 545 550 555 560  
 His Gly Lys Glu Gln Pro Leu Asp Glu Glu Leu Lys Asp Ala Phe Gln  
 565 570 575  
 Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly Phe  
 580 585 590  
 Cys His Leu Phe Leu Pro Asp Glu Gln Phe Pro Glu Gly Phe Gln Phe  
 595 600 605  
 Asp Thr Asp Asp Val Asn Phe Pro Ile Asp Asn Leu Cys Phe Val Gly  
 610 615 620  
 Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val  
 625 630 635 640  
 Gly Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp  
 645 650 655  
 His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser  
 660 665 670  
 Glu Gly Asn Glu Thr Val Glu Asp Ile Ala Ala Arg Leu Asn Ile Pro  
 675 680 685  
 Val Ser Gln Val Asn Pro Arg Asp Ala Lys Ala Cys Val Val His Gly  
 690 695 700  
 Ser Asp Leu Lys Asp Met Thr Ser Glu Gln Leu Asp Asp Ile Leu Lys  
 705 710 715 720  
 Tyr His Thr Glu Ile Val Phe Ala Lys Thr Ser Pro Gln Gln Lys Leu  
 725 730 735  
 Ile Ile Val Glu Arg Leu Pro Lys Thr Gly Cys Tyr Arg Gly Leu  
 740 745 750

&lt;210&gt; 746



733

<211> 25  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 746  
 Ile Pro Ala Leu Trp Xaa Ala Xaa Val Gly Arg Ser Leu Glu Pro Arg  
           1                  5                  10                  15  
 Ser Leu Arg Ser Ala Trp Ala Thr Trp  
                   20                  25

<210> 747  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 747  
 Xaa Xaa Leu Gly Gly Arg Val Cys Ser Glu Pro Arg Trp Arg His Cys  
           1                  5                  10                  15

Thr Pro Ala Trp Gly Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Lys  
                   20                  25                  30

Lys Lys Ile Lys Asn  
                   35

<210> 748

734

<211> 71  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (46)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (49)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 748  
 Asn Xaa Ala Leu Arg Asp Asp Val Ala Ala Gly Arg Arg Arg Leu His  
   1                  5                  10                  15  
 Ile Lys Ala Val Cys Gln Ser Val Arg Glu Ala Thr Thr Ala Ser Gly  
                   20                  25                  30  
 Gly Met Asn Ala Ala Ser Pro Arg Leu Xaa Arg His Arg Xaa Asn Gly  
           35                  40                  45  
 Xaa Tyr Phe Thr Leu Arg Glu Arg Leu Ile Thr Met Gln Lys Gln Leu  
   50                  55                  60  
 Gly Gly Asn Pro Glu Val Tyr  
   65                  70

<210> 749  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (19)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (41)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (43)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (59)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (61)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (70)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (75)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (88)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (90)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (93)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (102)  
<223> Xaa equals any of the naturally occurring L-amino acids

736

<220>  
 <221> SITE  
 <222> (104)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 749  
 Gly Ile Ser Arg Lys Met Lys Ser Ser Leu Pro Gln Gly Val Arg Asn  
   1                  5                  10                  15  
 Val Ala Xaa Val Cys Leu Gln Ile Gly Tyr Pro Thr Val Ala Ser Val  
           20                  25                  30  
 Pro His Ser Ile Ile Asn Gly Tyr Xaa Arg Xaa Leu Ala Leu Ser Val  
           35                  40                  45  
 Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu Xaa Val Xaa Ala Ser Trp  
   50                  55                  60  
 Leu Ile His Leu Pro Xaa Trp Leu Leu Pro Xaa Trp Leu Leu Pro Pro  
   65                  70                  75                  80  
 Gln Leu Leu Leu Leu Leu Leu Xaa Pro Xaa Leu Ser Xaa Asn Pro Arg  
           85                  90                  95  
 Lys Ser Glu Asp Pro Xaa Lys Xaa Trp Ile Gly Ser Leu  
           100                  105

<210> 750  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (16)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 750  
 Gly Thr Xaa Gly Pro Ala Ser Gly Val Ala Gly Thr Met Gln Arg Xaa  
   1                  5                  10                  15  
 Ser Leu Pro Phe Ala Ile Leu Thr Leu Val Asn Ala Pro Tyr Lys Arg  
           20                  25                  30

Gly Phe Tyr Cys Gly Asp Asp Ser Ile Arg Tyr Pro Tyr Arg Pro Asp  
           35                          40                          45  
 Thr Ile Thr His Gly Leu Met Ala Gly Val Thr Ile Thr Ala Thr Val  
           50                          55                          60  
 Ile Leu Val Ser Ala Gly Glu Ala Tyr Leu Val Tyr Thr Asp Arg Leu  
           65                          70                          75                          80  
 Tyr Ser Arg Ser Asp Phe Asn Asn Tyr Val Ala Ala Val Tyr Lys Val  
                           85                          90                          95  
 Leu Gly Thr Ser Cys Leu Gly Leu Pro  
           100                          105

<210> 751

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

738

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 751

Xaa	Ser	Arg	Lys	Pro	Arg	Xaa	Xaa	Val	Thr	Asp	Tyr	Ile	Lys	Val	Tyr
1				5					10					15	

Tyr	Thr	Leu	Arg	Lys	Gln	Met	Asn	Xaa	Asn	Leu	Phe	Ser	Ser	Phe	Ile
		20					25					30			

Thr	Pro	Thr	Ile	Ile	Gly	Leu	Pro	Ile	Val	Ile	Ile	Xaa	Thr	Met	Phe
	35					40					45				

Pro	Ser	Ile	Asp	Xaa	Pro	Ile	Thr	Tyr	Pro	Xaa	Xaa	Gln
50					55						60	

&lt;210&gt; 752

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 752

Ser	Asp	Pro	Glu	Ala	Glu	Val	Glu	Glu	Ser	Ser	Ser	Gly	Leu	Arg	Leu
1				5					10					15	

Ser	Leu	Ile	Lys	Met	Thr	Thr	Ser	Gln	Lys	His	Arg	Asp	Phe	Val	Ala
		20					25					30			

Xaa	Pro	Met	Gly	Glu	Asn	Gln	Trp	Gly	Thr	Trp	Leu	Gly	Leu	Val	Xaa
	35					40						45			

Ser Trp Ala Arg Asn Trp Lys Lys Gly Phe  
 50 55

<210> 753  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (51)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (52)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (53)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (63)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (71)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 753  
 Thr Leu His Ser Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Thr  
 1 5 10 15

Ala Ala Leu Glu Leu Val Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser  
 20 25 30

Glu Ser Tyr Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Xaa  
 35 40 45

Glu Asn Xaa Xaa Xaa Phe Arg Leu Val Cys Cys Val Glu Leu Xaa Ala

740

50

55

60

Asp Asn Asn Ser His Arg Xaa Gln Leu  
65 70

<210> 754  
<211> 116  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (17)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (43)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (62)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (67)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (68)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (87)  
<223> Xaa equals any of the naturally occurring L-amino acids



<220>  
 <221> SITE  
 <222> (88)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (92)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (101)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (107)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (109)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (112)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 754  
 Met Gly Ser Asp Tyr Ile Arg Glu Val Asn Val Val Lys Ser Ala Arg  
 1 5 10 15

Xaa Gly Tyr Ser Lys Met Leu Leu Gly Val Tyr Ala Tyr Phe Ile Glu

742

20	25	30
His Lys Gln Arg Asn Thr Leu Ile Trp Leu Xaa Thr Asp Gly Asp Ala		
35	40	45
Arg Glu Leu Tyr Glu Lys Pro Thr Leu Ser Pro Thr Ile Xaa Asp Ile		
50	55	60
Pro Ser Xaa Xaa Gly Ala Gly Pro Val Val Trp Gln Lys Ser Thr Gly		
65	70	75
		80
Xaa Asn Lys Xaa Asn His Xaa Xaa Val Ser Xaa Xaa Trp Gly Gly Pro		
85	90	95
Arg Asn Pro Ile Xaa Pro Ile Ser Xaa Trp Xaa Phe Xaa Asn Ser Xaa		
100	105	110
Gly Pro Xaa Phe		
115		

&lt;210&gt; 755

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (120)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (138)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

743

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (146)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 755

Ile Arg Gln Xaa Ile Asp Ile Arg Lys Asp Leu Tyr Ala Asn Asn Val  
 1 5 10 15

Leu Ser Gly Gly Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln  
 20 25 30

Lys Glu Ile Thr Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile  
 35 40 45

Ala Pro Pro Glu Ala Gln Ile Leu Cys Leu Asp Arg Trp Leu His Pro  
 50 55 60

Gly Leu Ser Val His Leu Pro Ala Asp Val Asp Gln Gln Thr Gly Asn  
 65 70 75 80

Thr Val Lys Pro Gly Leu Pro Leu Ser Thr Ala Asn Ala Phe Leu Lys  
 85 90 95

His Phe Ser Trp Phe Leu Phe Cys Leu Leu Gly Thr Gln Leu Trp Asn  
 100 105 110

Val Pro Val Gly Ile Tyr Gly Xaa Phe Ser Phe Phe Phe Gln Ile Ile  
 115 120 125

Pro Arg Ala Lys Val Leu Xaa Trp Xaa Xaa His Gly Val Phe Leu Asn  
 130 135 140

Lys Xaa Trp Lys  
 145

&lt;210&gt; 756

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 756

Ala Glu Leu Ala Thr Thr Ser Thr Met Pro Tyr Gln Tyr Pro Ala Leu

744

1                    5                    10                    15  
Thr Pro Glu Gln Lys Lys Glu Leu Ser Asp Ile Ala His Arg Ile Val  
20                    25                    30  
Ala Pro Gly Lys Gly Ile Leu Ala Ala Asp Glu Ser Thr Gly Ser Ile  
35                    40                    45  
Ala Lys Arg Leu Gln Ser Ile Gly Thr Glu Asn Thr Glu Glu Asn Arg  
50                    55                    60  
Arg Phe Tyr Arg Gln Leu Leu Thr Ala Asp Asp Arg Val Asn Pro  
65                    70                    75                    80  
Cys Ile Gly Gly Val Ile Leu Phe His Glu Thr Leu Tyr Gln Lys Ala  
85                    90                    95  
Asp Asp Gly Arg Pro Phe Pro Gln Val Ile Lys Ser Lys Gly Gly Val  
100                    105                    110  
Val Gly Ile Lys Val Asp Lys Gly Val Val Pro Leu Ala Gly Thr Asn  
115                    120                    125  
Gly Glu Thr Thr Thr Gln Gly Leu Asp Gly Leu Ser Glu Arg Cys Ala  
130                    135                    140  
Gln Tyr Xaa Glu Gly Arg Ser  
145                    150

&lt;210&gt; 757

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

745

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (91)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 757

Phe	Val	Thr	Ile	Leu	Ser	Ile	Ile	Ile	Thr	Leu	Phe	Phe	Ile	Phe	Gln
1				5					10					15	

Leu	Lys	Val	Ser	Xaa	Tyr	Ser	Phe	Pro	Glu	Asn	Pro	Glu	Pro	Lys	Ser
			20					25						30	

Leu	Thr	Thr	Ser	Lys	Ser	Thr	Thr	Pro	Trp	Arg	Xaa	Gln	Met	Asn	Xaa
			35					40						45	

Asn	Leu	Phe	Ser	Ser	Phe	Ile	Thr	Pro	Thr	Ile	Ile	Gly	Leu	Pro	Ile
	50					55						60			

Val	Ile	Ile	Ile	Thr	Met	Phe	Pro	Ser	Ile	Ile	Phe	Pro	Ser	Pro	Thr
65					70					75					80

Arg	Leu	Ile	Asn	Asn	Arg	Leu	Ile	Ser	Ile	Xaa	Thr	Met	Asp
			85							90			

&lt;210&gt; 758

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (43)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (49)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (51)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (58)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (99)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 758  
 Arg Xaa Ala Leu Xaa Arg Leu Thr Ile Gly Xaa Ser Trp Tyr Ala Cys  
     1                    5                    10                    15  
 Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Xaa Arg Arg  
           20                    25                    30  
 Gly Gln Leu Arg Ala Arg Gly Gly Gly Ala Xaa Pro Arg Gly Ala Met  
       35                    40                    45  
 Xaa Asp Xaa Arg Ala Gly Ser Pro Arg Xaa Gly Pro Ala Ala Arg Asp  
       50                    55                    60  
 Val Ala Ala Met Ala Ser Pro Gln Leu Cys Arg Ala Leu Val Ser Ala  
       65                    70                    75                    80

747

Gln Trp Val Ala Glu Ala Leu Arg Ala Pro Arg Ala Gly Ala Ala Ser  
                             85                            90                            95

Ala Ala Xaa Arg Thr Pro Pro Gly Xaa Leu Ala Gly Ser Trp Gly Ala  
                             100                            105                            110

Arg Thr Xaa  
                             115

<210> 759  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (17)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (43)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 759  
 Ile Ala Xaa Gly Arg Ser Arg Gly Ser Lys Leu Thr Trp Thr Cys Met  
       1                            5                            10                            15

Xaa Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala  
                             20                            25                            30

Val Val Leu Gln Arg Arg Asp Trp Glu Xaa Xaa Lys  
                             35                            40

<210> 760  
 <211> 94  
 <212> PRT

748

<213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (80)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <400> 760  
 Asn Asp Leu Val Glu Tyr Ser Pro Val Thr Glu Lys His Leu Thr Asp  
 1 5 10 15  
 Gly Met Thr Val Arg Glu Leu Cys Ser Ala Ala Ile Thr Met Ser Asp  
 20 25 30  
 Asn Thr Ala Ala Asn Leu Leu Leu Thr Thr Ile Gly Gly Pro Lys Glu  
 35 40 45  
 Leu Thr Ala Phe Leu His Asn Met Gly Asp His Val Thr Arg Leu Asp  
 50 55 60  
 Arg Trp Glu Pro Glu Leu Asn Glu Ala Ile Pro Asn Asp Glu Arg Xaa  
 65 70 75 80  
 Thr Thr Met Pro Val Ala Met Ala Thr Thr Xaa Ala Asn Tyr  
 85 90

<210> 761  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (21)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (24)



749

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 761

Leu Gln Glu Ile Asn Arg Val Tyr Xaa Glu Met Tyr Lys Thr Asp Leu  
1 5 10 15

Glu Lys Asp Ile Xaa Ser Asp Xaa Ser Gly Asp Phe Arg Lys Leu Met  
20 25 30

Val Ala Leu Ala Lys Gly  
35

<210> 762

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 762

Cys Lys Xaa Xaa Leu Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro  
1 5 10 15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu  
20 25 30

Phe Gly Thr Ser Cys Val Gly Leu Arg Glu Ala Val Arg Ala Gly Ala  
35 40 45

Val Gly Arg Gly Ala Glu Ala Leu Ala Arg Gly Met Ala His Cys Val  
50 55 60

Thr Leu Val Gln Leu Ser Ile Ser Cys Asp His Leu Ile Asp Lys Asp  
65 70 75 80

Ile Gly Ser Lys Ser Asp Pro Leu Cys Val Leu Leu Gln Asp Val Gly  
85 90 95

Gly Gly Ser Trp Ala Glu Leu Gly Arg Thr Glu Arg Val Arg Asn Cys  
100 105 110

750

Ser Ser Pro Glu Phe Ser Lys Thr Leu Gln Leu Glu Tyr Arg Phe Glu  
 115 120 125

Thr Val Gln Lys Leu Arg Phe Gly Ile Tyr Asp Ile Asp Asn Lys Thr  
 130 135 140

Pro Glu Leu Arg Asp Asp Asp Phe Leu Gly Gly Ala Glu Cys Ser Leu  
 145 150 155 160

Gly Gln Ile Val Ser Ser Gln Val Leu Thr Leu Pro Leu Met Leu Lys  
 165 170 175

Leu Glu Asn Leu Leu Gly Gly Gly Pro Ser Arg Ser Gln Leu Arg Asn  
 180 185 190

&lt;210&gt; 763

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 763

Ser Phe Tyr Ser Ile Pro Glu Phe Asp Glu Trp Lys Lys His Ile Glu  
 1 5 10 15

Asn Gln Lys Ala Trp Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser  
 20 25 30

Thr Ala Lys Glu Ala Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg  
 35 40 45

Ile Leu Phe Arg Tyr Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu  
 50 55 60

Ala Phe Ser Lys Lys Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn  
 65 70 75 80

Phe Met Glu Asp Arg Arg Gln Arg Ser Tyr Met Ala Tyr Gln Arg Xaa  
 85 90 95

Asp Ser Leu Ser Thr Gln Thr  
 100

751

<210> 764  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (101)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 764  
 Val Phe Ser Pro Thr Gly Ser Asp Gly Pro Leu Ala Thr Ser Lys Pro  
   1                  5                  10                  15  
 Val Pro Ala Glu Lys Ser Gly Leu Pro Val Gly Pro Glu Asn Gly Val  
                   20                  25                  30  
 Glu Leu Ser Lys Glu Glu Leu Ile Arg Arg Lys Arg Glu Glu Phe Ile  
       35                  40                  45  
 Gln Lys His Gly Arg Gly Met Glu Lys Ser Asn Lys Ser Thr Lys Ser  
       50                  55                  60  
 Asp Ala Pro Lys Glu Lys Gly Lys Lys Ala Pro Arg Val Trp Glu Leu  
       65                  70                  75                  80  
 Gly Gly Cys Ala Asn Lys Glu Met Leu Asp Tyr Ser Thr Ser Thr Thr  
                   85                  90                  95  
 Asn Gly Thr Pro Xaa Ala Cys Leu Val  
       100                  105

<210> 765  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 765  
 Gly Arg Glu Thr Met Phe Arg Ala Ala Ala Pro Gly Gln Leu Arg Arg  
   1                  5                  10                  15  
 Ala Ala Ser Leu Leu Arg Phe Gln Ser Thr Leu Val Ile Ala Glu His  
       20                  25                  30  
 Ala Asn Asp Ser Leu Ala Pro Ile Thr Leu Asn Thr Ile Thr Ala Ala  
       35                  40                  45

752

Thr Arg Leu Gly Gly Glu Val Ser Cys Leu Val Ala Gly Thr Lys Cys  
 50 55 60  
 Asp Lys Val Ala Gln Asp Leu Cys Lys Val Ala Gly Ile Ala Lys Val  
 65 70 75 80  
 Leu Val Ala Gln His Asp Val Tyr Lys Gly Leu Leu Pro Glu Glu Leu  
 85 90 95  
 Thr Pro Leu Ile Leu Ala Thr Gln Lys Gln Phe Asn Tyr Thr His Ile  
 100 105 110  
 Cys Ala Gly Ala Ser Ala Phe Gly Lys Asn Leu Leu Pro Arg Val Ala  
 115 120 125  
 Ala Lys Leu Glu Val Ala Pro Ile Ser Asp Ile Ile Ala Ile Lys Ser  
 130 135 140  
 Pro Asp Thr  
 145

&lt;210&gt; 766

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 766

Gly Arg Glu Ala Glu Ala Xaa Gln Leu Glu Ser Ser Lys Arg Phe Ala  
 1 5 10 15

Lys Xaa Phe Met Asp Arg His Gly Ile Pro Thr Ala Gln Trp Glu Gly  
 20 25 30

Phe His Gln Thr  
 35

<210> 767  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (62)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (80)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (98)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (100)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 767  
 Arg Phe Ala Leu Ser Thr Lys Ile Pro Asp Thr Lys Gly Cys Leu Gln  
 1 5 10 15  
 Cys Arg Val Val Arg Asn Pro Tyr Thr Gly Ala Thr Phe Leu Leu Ala  
 20 25 30  
 Ala Leu Pro Thr Ser Leu Leu Leu Leu Gln Trp Tyr Glu Pro Leu Gln  
 35 40 45  
 Lys Phe Leu Leu Leu Lys Asn Phe Ser Ser Pro Leu Pro Xaa Pro Ala  
 50 55 60  
 Gly Met Leu Xaa Pro Leu Val Leu Asp Gly Lys Glu Leu Pro Gln Xaa  
 65 70 75 80

754

Phe Phe Gly Ala Glu Gly Pro Lys Gly Pro Gly Cys Arg Phe Leu Phe  
                                     85                                    90                                    95

Gln Xaa Leu Xaa Leu Gly Gly Trp Xaa  
                                     100                                    105

&lt;210&gt; 768

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 768

Val Thr Leu Thr Gln Cys Ser Glu Lys Leu Val Gln Leu Ile Leu His  
   1                                    5                                    10                                    15

Glu Tyr Lys Ile Phe Asn Ala Glu Val Leu Phe Arg Glu Asp Cys Ser  
                                     20                                    25                                    30

Pro Asp Glu Phe Ile Asp Val Ile Val Gly Asn Arg Val Tyr Met Pro  
                                     35                                    40                                    45

Cys Leu Tyr Val Tyr Asn Lys Ile Asp Gln Ile Ser Met Glu Glu Val  
                                     50                                    55                                    60

Asp Arg Leu Ala Arg Lys Pro Asn Ser Val Val Ile Ser Cys Gly Met  
   65                                    70                                    75                                    80

Lys Leu Asn Leu Asp Tyr Leu Leu Glu Met Leu Trp Glu Tyr Leu Ala  
                                     85                                    90                                    95

Leu Thr Cys Ile Tyr Thr Lys Lys Arg Gly Gln Arg Pro Asp Phe Thr  
                                     100                                    105                                    110

Asp Ala Ile Ile Leu Arg Lys Gly Ala Ser Val Glu His Val Gly Thr  
                                     115                                    120                                    125

Ser Thr Lys Tyr Ser Pro Gln Arg Val Gly Leu Thr His Thr Met Glu  
                                     130                                    135                                    140

His Glu Asp Val Ile Gln Ile Val Lys Lys  
   145                                    150

&lt;210&gt; 769

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

755

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 769

Asn Gln Ala Gly Leu Thr Ala Asp Arg Met Leu Val Leu Ser Arg Ala  
1 5 10 15

Gly Gln Ala Ala Gly Leu Thr Phe Asn Gln Thr Ser Glu Ser Leu Ser  
20 25 30

Ala Leu Val Lys Ala Gly Val Ser Gly Glu Ala Gln Ile Ala Ser Ile  
35 40 45

Ser Gln Ser Val Ala Arg Phe Xaa Ser Ala Ser Gly Val Glu Val Asp  
50 55 60

Lys Val Val Glu Ala Phe Glu Gly Gly Pro Tyr Pro Phe Ala Tyr Ser  
65 70 75 80

Lys Arg Ile Xaa Ile Ile Ala Val Phe  
85

&lt;210&gt; 770

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

756

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 770

Gln Thr Ser Arg Ala Glu Ser Ala Ser Met Thr Glu Arg Arg Val Pro  
 1 5 10 15

Phe Ser Leu Leu Arg Gly Pro Ser Trp Asp Pro Phe Arg Asp Trp Tyr  
 20 25 30

Pro His Ser Arg Leu Phe Asp Gln Ala Phe Gly Leu Pro Arg Leu Pro  
 35 40 45

Glu Glu Trp Ser Gln Trp Leu Gly Xaa Ser Ser Trp Pro Gly Tyr Val  
 50 55 60

Arg Pro Leu Pro Pro Ala Ala Ser Arg Ala Pro Gln Trp Pro Xaa Pro  
 65 70 75 80

Leu Gln Xaa Xaa Ala  
 85

&lt;210&gt; 771

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 771

Asp Tyr Cys Gln Val Val Arg Pro Ser Pro Ser Gly Glu Thr Ile Thr  
 1 5 10 15

Tyr Arg Gln Val Val Leu Ser Val Asn Val Lys Ser Pro Ala Leu Leu



757

20                      25                      30  
 Leu Ser Gln Leu Leu Pro Tyr Met Glu Asn Lys Lys Gly Ala Val Xaa  
           35                      40                      45  
 Leu Xaa Ser Ser Ile Ala Ala Tyr Asn Pro Val Val Ala Leu Gly Val  
           50                      55                      60  
 Tyr Asn Val Ser Lys Xaa Glu Leu Leu Gly Ser His  
           65                      70                      75

&lt;210&gt; 772

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 772

Gly Ala Glu Glu Gly Arg Gln Glu Ala Gln Gly Xaa Arg Lys Glu Ser  
           1                      5                      10                      15

Tyr Ser Val Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr  
           20                      25                      30

Gly Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp  
           35                      40                      45

Ile Phe Glu Arg Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn  
           50                      55                      60

Lys Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu  
           65                      70                      75                      80

Leu Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys  
           85                      90                      95

Ala Val Thr Lys Tyr Thr Ser Ala Lys  
           100                      105

&lt;210&gt; 773

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<220>  
 <221> SITE  
 <222> (98)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (139)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (140)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (141)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 773  
 Phe Ala His Leu Pro Lys Ser Thr Phe Val Leu Asp Glu Phe Lys Arg  
     1                    5                    10                    15  
 Lys Tyr Ser Asn Glu Asp Thr Leu Ser Val Ala Leu Pro Tyr Phe Trp  
                     20                    25                    30  
 Glu His Phe Asp Lys Asp Gly Trp Ser Leu Trp Tyr Ser Glu Tyr Arg  
             35                    40                    45  
 Phe Pro Glu Glu Leu Thr Gln Thr Phe Met Ser Cys Asn Leu Ile Thr  
     50                    55                    60  
 Gly Met Phe Gln Arg Leu Asp Lys Leu Arg Lys Asn Ala Phe Ala Ser  
     65                    70                    75                    80  
 Val Ile Leu Phe Gly Thr Asn Asn Ser Ser Ser Ile Ser Gly Val Trp  
                     85                    90                    95  
 Val Xaa Pro Gly Gln Glu Leu Ala Phe Pro Leu Ser Pro Asp Trp Gln  
             100                    105                    110  
 Val Asp Tyr Glu Val Ile His Met Ala Glu Thr Gly Ser Gly Lys Arg  
     115                    120                    125

Gly Asp Pro Xaa Ala Gly Ser Arg Val Leu Xaa Xaa Xaa Arg Gly Pro  
 130 135 140

<210> 774  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (56)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 774  
 Ile Arg His Glu Arg Glu Xaa Glu Gln Gly Val Tyr Thr Cys Thr Ala  
 1 5 10 15  
 Gln Gly Ile Trp Lys Asn Glu Gln Lys Gly Glu Lys Ile Pro Arg Cys  
 20 25 30  
 Leu Pro Val Cys Gly Lys Pro Val Asn Pro Val Glu Gln Arg Gln Arg  
 35 40 45  
 Ile Ile Gly Gly Gln Lys Ala Xaa Gly Ile Val Gly Ala Phe Leu Gln  
 50 55 60

<210> 775  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 775  
 Asn Ile Ser Asn Ser Gln Val Asn Arg Leu Arg His Phe Val Arg Ala  
 1 5 10 15  
 Gly Leu Arg Ser Leu Phe Arg Pro Glu Pro Gln Thr Ala Val Glu Trp

760

20                      25                      30  
 Ala Asp Ala Asn Tyr Tyr Leu Pro Lys Glu Ser Ala Tyr Gln Glu Gly  
          35                      40                      45  
 Arg Trp Glu Thr Leu Pro Phe Gln Arg Ala Ile Met Asn Ala Asn Gly  
          50                      55                      60  
 Gln Arg Leu His Pro  
          65

<210> 776  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (15)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 776  
 Glu Arg Val Phe Xaa Pro His Gly Leu Ile Met Asp Arg Thr Xaa Arg  
   1                      5                      10                      15

Phe Ala Arg Asn Val Met Lys Glu Met Gly Gly His His Ile Xaa Val  
          20                      25                      30

Leu Phe Leu Leu Lys Gly Gly Tyr Lys Phe Phe Ala Asp Leu Leu Asp

761

35                      40                      45  
 Tyr Ile Lys Gly Leu Xaa Xaa Lys  
     50                      55  
  
 <210> 777  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 777  
 Leu Gln Phe Xaa Xaa Xaa Met Ile Thr Pro Ser Ser Asn Thr Thr His  
     1                      5                      10                      15  
 Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly  
             20                      25                      30  
 Ser Thr His Ala Ser Gly Val Phe Glu Val His Lys Lys Asn Val Arg  
         35                      40                      45  
 Gly Glu Phe Thr Tyr Tyr Glu Ile Gln Asp Asn Thr Gly Lys Met Glu  
     50                      55                      60  
 Val Val Val His Gly Arg Leu Thr Thr Ile Asn Cys Glu Glu Gly Asp  
     65                      70                      75                      80  
 Lys Leu Lys Leu Thr Cys Phe Glu Leu Ala Pro Lys Ser Gly Asn Thr  
             85                      90                      95  
 Gly Glu Leu Arg Ser Val Ile His Ser His Ile Lys Val Ile Lys Thr  
     100                      105                      110  
 Arg Lys Asn Lys Lys Asp Ile Leu Asn Pro Asp Ser Ser Met Glu Thr  
     115                      120                      125

Ser Pro Asp Phe Phe Phe  
130

<210> 778

<211> 133

<212> PRT

<213> Homo sapiens

<400> 778

Thr Ile Thr Ser Gly Gly Asn Pro Pro Ala Phe Ser Leu Thr Pro Asp  
1 5 10 15

Gly Lys Leu Thr Ala Lys Asn Ala Asp Ile Ser Gly Ser Val Asn Ala  
20 25 30

Asn Ser Gly Thr Leu Ser Asn Val Thr Ile Ala Glu Asn Cys Thr Ile  
35 40 45

Asn Gly Thr Leu Arg Ala Glu Lys Ile Val Gly Asp Ile Val Lys Ala  
50 55 60

Ala Ser Ala Ala Phe Pro Arg Gln Val Glu Ser Ser Val Asp Trp Pro  
65 70 75 80

Ser Gly Thr Arg Thr Val Thr Val Thr Asp Asp His Pro Phe Asp Arg  
85 90 95

Gln Ile Val Val Leu Pro Leu Thr Phe Arg Gly Ser Lys Arg Thr Val  
100 105 110

Ser Gly Arg Thr Thr Tyr Ser Met Cys Tyr Leu Lys Val Leu Met Asn  
115 120 125

Gly Ala Val Ile Tyr  
130

<210> 779

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

763

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 779

Pro Asn Thr Ala Leu Val Gly Val Gln Val Asp Ser Glu Gln Phe Gly  
1 5 10 15

Ser Gln Gln Val Ser Arg Asn Tyr His Leu Arg Gly Arg Ile Leu Gln  
20 25 30

Val Pro Ser Asn Tyr Asn Pro Gln Thr Arg Gln Tyr Ser Gly Ile Trp  
35 40 45

Asp Gly Thr Xaa Lys Pro Ala Tyr Ser Asn Asn Met Ala Trp Xaa Leu  
50 55 60

Trp Asp Met Leu Thr His Pro Arg Tyr Gly Met Gly Lys Arg Leu Gly  
65 70 75 80

Ala Ala Asp Val Asp Lys Trp Ala Leu Tyr  
85 90

&lt;210&gt; 780

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (62)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (65)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (70)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (73)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 780  
 Val Xaa Arg Ala Ser Asp Asp Ala Glu Gly Tyr Leu Asp Xaa Phe Lys  
   1                  5                  10                  15  
 Gly Lys Ile Thr Glu Ser His Leu Xaa Lys Glu Leu Leu Glu Lys Val  
                   20                  25                  30  
 Glu Leu Thr Glu Asp Asn Ala Ser Arg Leu Glu Glu Phe Ser Lys Xaa  
           35                  40                  45  
 Trp Lys Asp Ala Ser Xaa Lys Trp Asn Ala Met Trp Ala Xaa Lys Ile  
   50                  55                  60  
 Xaa Gln Thr Lys Asp Xaa Lys Arg Xaa Leu Phe Cys Tyr Leu Val Val  
   65                  70                  75                  80  
 Arg Ser

<210> 781  
 <211> 49  
 <212> PRT  
 <213> Homo sapiens



765

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 781

Pro	Asp	Phe	His	Arg	Glu	Asp	Asp	Trp	Trp	Arg	Asn	Gly	Gln	Asn	Leu
1				5				10					15		

Tyr	Leu	Asp	Asn	Leu	Glu	Ala	Thr	Gly	Leu	Tyr	Gln	Val	Pro	Leu	Ser
			20					25					30		

Ala	Ala	Gln	Pro	Gly	Asp	Val	Leu	Leu	Cys	Xaa	Phe	Gly	Ser	Ser	Xaa
		35					40						45		

Xaa

&lt;210&gt; 782

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 782

Xaa	Lys	Glu	Asn	Gly	Thr	Val	Thr	Ala	Ala	Asn	Ala	Ser	Thr	Leu	Asn
1				5				10					15		

Asp	Gly	Ala	Ala	Ala	Leu	Val	Leu	Met	Thr	Ala	Asp	Ala	Ala	Xaa	Arg
			20					25						30	

766

Leu Asn Val Thr Pro Leu Ala Arg Ile Val Ala Phe Ala Asp Ala Ala  
35 40 45  
Val Glu Pro Ile Asp Phe Pro Ile Ala Pro Val Tyr Ala Ala Ser Met  
50 55 60  
Val Leu Lys Asp Val Gly Leu Lys Lys Glu Asp Ile Ala Met Trp Glu  
65 70 75 80  
Val Asn Gly Ser Leu  
85

<210> 783  
<211> 90  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (14)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (16)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (27)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (30)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (39)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (87)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 783

Gly	Lys	Ser	Pro	Ala	Ser	Trp	Trp	Gly	Ser	Ala	Gly	His	Xaa	Xaa	Xaa
1					5				10					15	

Pro	Cys	Arg	Gly	Ala	Cys	Ala	Ala	Ala	Gly	Xaa	Thr	Ala	Xaa	Arg	Gly
			20					25					30		

Phe	Ala	Val	Ser	Ala	Arg	Xaa	Val	Trp	Gln	Thr	Xaa	Asp	Arg	Pro	Gly
		35					40					45			

Thr	Trp	Asp	Gln	Ser	Arg	Asn	Leu	Leu	Leu	Asn	Gly	Lys	Ser	Xaa	Pro
		50				55					60				

Thr	Lys	Val	Arg	Leu	Ile	Trp	Gly	Gly	Ser	Leu	Pro	Pro	Val	Lys	Arg
	65				70					75					80

Xaa	Ala	Asp	Glu	Leu	Asp	Xaa	Arg	Pro	Gly
				85					90

&lt;210&gt; 784

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

768

<221> SITE  
 <222> (64)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (70)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (79)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 784  
 Ala Leu Leu Gly Leu Thr Ile Xaa Lys Ala Gly Thr Pro Ala Gly Thr  
     1                    5                    10                    15  
 Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Leu Leu Cys Leu Glu  
             20                    25                    30  
 Gly Ile Ile Leu Ser Leu Phe Val Ile Ile Thr Ile Thr Ile Leu Ile  
             35                    40                    45  
 Asn His Leu Thr Leu Ala Ser Ile Thr Pro Ile Ile Leu Leu Val Xaa  
     50                    55                    60  
 Ala Ala Cys Glu Ala Xaa Leu Gly Leu Ile Pro Phe Ser Tyr Xaa Leu  
     65                    70                    75                    80  
 Xaa Tyr Ile Arg

<210> 785  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 785  
 Ile Gly Phe Asp Asn Lys Lys Asp Leu Leu Ile Ser Val Gly Asp Leu  
     1                    5                    10                    15  
 Val Asp Arg Gly Ala Glu Asn Val Glu Cys Leu Glu Leu Ile Thr Phe  
             20                    25                    30

Gly Leu Ser Glu Arg Gly Asn Val Asn His Trp Leu Leu  
50 55 60

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<220>  
<221> SITE  
<222> (8)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (33)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (64)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (83)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (86)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 786  
Gly Leu Gln Pro Tyr Cys Tyr Xaa Thr Trp Arg Cys Arg Cys Thr Thr  
1 5 10 15

Gly Gln Pro Gly Thr Ala Pro Ala Gly Thr Pro Gly Ala Pro Pro Leu  
20 25 30

770

Xaa Gly Met Ala Ile Val Lys Glu Glu Glu Thr Glu Ala Ala Ile Gly  
           35                  40                  45  
 Ala Pro Pro Thr Ala Thr Glu Gly Pro Glu Thr Lys Pro Val Leu Xaa  
           50                  55                  60  
 Ala Leu Glu Glu Gly Pro Gly Ala Glu Gly Ser Arg Leu Asp Ser Leu  
           65                  70                  75                  80  
 Val Ala Xaa Xaa Leu Xaa Leu Glu Val Val Ala Leu Arg Asp Ser Ala  
                   85                  90                  95  
 Pro Val Leu Ala Gly Thr  
                   100

<210> 787  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (44)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 787  
 Cys Leu Xaa Arg Ala Arg Xaa Pro Ala Ala Ala Asn Ser Ser Gly Asp  
   1                  5                  10                  15  
 Gly Gly Ala Ala Gly Asp Gly Thr Val Val Asp Cys Pro Val Cys Lys  
           20                  25                  30  
 Gln Gln Cys Phe Ser Lys Asp Ile Val Glu Asn Xaa Phe Met Arg Xaa  
           35                  40                  45

771

Ser Gly Ser Lys Ala Ala Thr Asp Ala Gln Asp Ala Asn Gln Cys Cys  
 50 55 60

&lt;210&gt; 788

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 788

Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro  
 1 5 10 15

Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys  
 20 25 30

Asp Leu Lys Glu Lys Lys Glu Val Leu Glu Arg Gly Arg Lys Trp Lys  
 35 40 45

Arg Arg Pro Xaa Leu Thr Gly Asn Ala Asn Leu Gly Lys  
 50 55 60

&lt;210&gt; 789

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 789

Ala Gln Asp Asn Phe Lys His Leu Asn Gly Ile Xaa Leu Phe His Cys  
 1 5 10 15

Ile Asp Pro Asn Gly Ser Lys His Lys Arg Thr Asp Arg Ser Ile Leu  
 20 25 30

772

Cys Cys Leu Arg Lys Gly Glu Ser Gly Gln Ser Trp Gln Gly Leu Thr  
 35 40 45

Lys Glu Arg Ala Lys Leu Asn Trp Leu Ser Val Asp Phe Asn Asn Trp  
 50 55 60

Glu Arg Leu Gly Arg  
 65

<210> 790

<211> 51

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 790

Gln Ser Thr Val Lys Leu Glu His Ala Lys Ser Val Ala Ser Arg Ala  
 1 5 10 15

Thr Val Leu Gln Lys Xaa Ser Xaa Thr Pro Val Gly Met Phe Leu Lys  
 20 25 30

Leu Asn Xaa Met Asn Val Lys Phe Xaa Ser Gly Tyr Tyr Glu Leu Pro  
 35 40 45

Cys Arg Ser  
 50



773

<210> 791  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (78)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 791  
 Asp Pro Gln Ala His Val Ala Met Leu Ser Ser Thr Ala Met Tyr Ser  
           1                  5                  10                  15  
 Ala Pro Gly Arg Asp Leu Gly Met Glu Pro His Arg Ala Ala Gly Pro  
                   20                  25                  30  
 Leu Gln Leu Arg Phe Ser Pro Tyr Val Phe Asn Gly Gly Thr Ile Leu  
           35                  40                  45  
 Ala Ile Ala Gly Glu Asp Phe Ala Ile Val Ala Ser Asp Thr Arg Leu  
           50                  55                  60  
 Ser Glu Gly Phe Ser Ile His Thr Arg Asp Ser Pro Lys Xaa Tyr Lys  
           65                  70                  75                  80  
 Leu Thr Asp Lys Thr Val Ile Gly Cys Ser Gly Phe His Gly Asp Cys  
                   85                  90                  95  
 Leu Thr Leu Thr Lys Ile Ile Glu Ala Arg Leu Lys Met Tyr Lys His  
           100                  105                  110  
 Ser Asn Asn Lys Ala Met Thr Thr Gly Ala Ile Ala Ala Met Leu Ser  
           115                  120                  125  
 Thr Ile Leu Tyr Ser Arg Arg Phe Phe Pro Tyr Tyr Val Tyr Asn Ile  
           130                  135                  140  
 Ile Gly Gly Leu Asp Glu Glu Gly Lys Gly  
           145                  150

<210> 792  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (72)

774

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 792

Gly Thr Ala Ser Thr Ala Met Tyr Ser Ala Pro Gly Arg Asp Leu Gly  
1 5 10 15

Met Glu Pro His Arg Ala Ala Gly Pro Leu Gln Leu Arg Phe Ser Pro  
20 25 30

Tyr Val Phe Asn Gly Gly Thr Ile Leu Ala Ile Ala Gly Glu Asp Phe  
35 40 45

Ala Ile Val Ala Ser Asp Thr Arg Leu Ser Glu Gly Phe Ser Ile His  
50 55 60

Thr Arg Asp Ser Pro Lys Cys Xaa Xaa Xaa Asn Arg Gln Asn Ser His  
65 70 75 80

Trp Met Gln Arg Phe Ser Trp Arg Leu Ser Tyr Ala Asp Lys Asp Tyr  
85 90 95

<210> 793

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 793

Arg Pro Pro Val Arg Xaa Phe Leu Arg Asp Phe Phe Met Ser Met Tyr  
1 5 10 15

Thr Thr Ala Gln Leu Leu Ala Ala Asn Glu Gln Lys Phe Lys Phe Asp

**<220>**

<221> SITE  
<222> (3)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (6)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (11)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (16)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<222> (19)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (23)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<222> (33)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (39)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (54)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

<222> (64)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (76)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (78)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (83)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (87)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (88)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (89)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (93)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (107)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (112)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (136)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 795

Ala Arg Xaa Trp Leu Xaa Gly Val Thr Phe Xaa Val Thr Thr Val Xaa  
1 5 10 15

Thr Lys Xaa Arg Thr Glu Xaa Val Gln Lys Leu Cys Pro Gly Gly Gln  
20 25 30

Xaa Pro Phe Leu Leu Tyr Xaa Thr Glu Val His Thr Asp Thr Asn Lys  
35 40 45

Xaa Ala Glu Phe Leu Xaa Ala Val Leu Cys Pro Pro Arg Tyr Pro Xaa  
50 55 60

Leu Ala Ala Leu Asn Pro Xaa Ser Asn Thr Ala Xaa Leu Xaa Ile Phe

779

65                      70                      75                      80  
 Xaa Lys Xaa Ser Ala Tyr Xaa Xaa Xaa Ser Asn Pro Xaa Leu Asn Asp  
                                  85                      90                      95  
 Asn Leu Glu Xaa Gly Leu Leu Lys Ala Leu Xaa Val Leu Xaa Asn Xaa  
                                  100                      105                      110  
 Leu Thr Ser Pro Xaa Ser Glu Glu Val Asp Xaa Thr Ser Ala Xaa Val  
                                  115                      120                      125  
 Lys Val Ser Leu Arg Arg Ser Xaa Trp Ile Ala Arg Ala His Pro Gly  
                                  130                      135                      140

&lt;210&gt; 796

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 796

Ile Met Lys Asn Gly Phe Tyr Ala Thr Tyr Arg Ser Lys Asn Lys Gly  
 1                      5                      10                      15

Lys Asp Lys Arg Ser Ile Asn Leu Ser Val Phe Leu Asn Ser Xaa Leu  
 20                      25                      30

Ala Asp Asn His His Leu Gln Val Gly Ser Asn Tyr Leu Tyr Ile His  
 35                      40                      45

Lys Ile Asp Gly Lys Thr Phe Leu Phe Thr Lys Thr Asn Asp Lys Ser  
 50                      55                      60

Leu Val Gln Lys Ile Asn Arg Ser Lys Ala Ser Val Glu Asp Ile Lys  
 65                      70                      75                      80

Asn Ser Leu Val Asp Asp Gly Ile Ile Gly Ile Pro Ile Phe Phe Val  
 85                      90                      95

Cys

780

<210> 797  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 797  
 Arg Xaa Xaa Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg  
 1 5 10 15  
 Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly  
 20 25 30  
 Thr Arg Pro Ser Arg Leu Arg Lys Thr Arg Lys Leu Arg Gly His Val  
 35 40 45  
 Ser His Gly His Gly Arg Ile Gly Lys His Arg Lys His Pro Gly Gly  
 50 55 60  
 Arg Gly Asn Ala Gly Gly Leu His His His Arg Ile Asn Phe Asp Lys  
 65 70 75 80  
 Tyr His Pro Gly Tyr Phe Gly Lys Val Gly Met Lys His Tyr His Leu  
 85 90 95  
 Lys Arg Asn Gln Ser Phe Cys Pro Thr Val Asn Leu Asp Lys Leu Trp  
 100 105 110  
 Thr Leu Val Ser Glu Gln Thr Arg Val Asn Ala Ala Lys Asn Lys Thr  
 115 120 125  
 Gly Ala Ala Pro Ile Ile Asp Val Val Arg Ser Gly Tyr Tyr Lys Val  
 130 135 140  
 Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val Ile Val Lys Ala Lys  
 145 150 155 160  
 Phe Phe Ser Arg Arg Ala Glu Glu Lys Ile Lys Ser Val Gly Gly Ala  
 165 170 175



781

Cys Val Leu Val Ala  
180

&lt;210&gt; 798

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 798

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Lys Glu Gly Trp  
1 5 10 15

Arg Glu Glu Lys Gly Pro Phe Cys His Gln Arg Arg Xaa Thr Arg Glu  
20 25 30

Tyr Thr Ile Asn Ile His Lys Arg Ile His Gly Val Gly Phe Lys Lys  
35 40 45

Arg Ala Pro Arg Ala Leu Lys Glu Ile Arg Lys Phe Ala Met Lys Glu  
50 55 60

Met Gly Thr Pro Asp Val Arg Ile Asp Thr Arg Leu Asn Lys Ala Val  
65 70 75 80

Trp Ala Lys Gly Ile Arg Asn Val Pro Tyr Arg Ile Arg Val Arg Leu  
85 90 95

Ser Arg Lys Arg Asn Glu Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr  
100 105 110

Leu Val Thr Tyr Val Pro Val Thr Thr Phe Lys Ile Ser Val Leu Asn  
115 120 125

Ser Val Thr Val Ala Lys Ser Pro  
130 135

&lt;210&gt; 799

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 799

782

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ala Ala Leu Ala Ala  
 1 5 10 15  
 Cys Ala Ala Met Ala Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys  
 20 25 30  
 Lys Glu Glu Leu Leu Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser  
 35 40 45  
 Gln Leu Arg Val Ala Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser  
 50 55 60  
 Lys Ile Arg Val Val Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile  
 65 70 75 80  
 Asn Gln Thr Gln Lys Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys  
 85 90 95  
 Tyr Lys Pro Leu Asp Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg  
 100 105 110  
 Arg Leu Asn Lys His Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg  
 115 120 125  
 Lys Glu Arg Leu Tyr Pro Leu Arg Lys Tyr Ala Val Lys Ala  
 130 135 140

&lt;210&gt; 800

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 800

Xaa	Xaa	Tyr	His	Lys	Tyr	Lys	Ala	Lys	Arg	Asn	Cys	Trp	Xaa	Xaa	Val
1				5					10					15	

Arg	Gly	Val	Xaa	Met	Asn	Pro	Val	Glu	His	Pro	Phe	Gly	Gly	Gly	Asn
		20						25					30		

His	Gln	His	Ile	Gly	Lys	Pro	Ser	Thr	Ile	Arg	Arg	Asp	Ala	Pro	Ala
	35					40						45			

Gly	Arg	Lys	Val	Gly	Leu	Ile	Ala	Ala	Xaa	Xaa	Xaa	Gly	Xaa	Leu	Xaa
	50					55						60			

784

Gly Thr Lys Xaa Val Gln Glu Lys Glu Asn  
 65 70

<210> 801  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (12)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (49)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 801  
 Met Thr Pro Val Gln Arg Gly Gly Pro Gly Ala Xaa Val Ala Leu Gly  
 1 5 10 15  
 Trp Gly Thr Ala Val Ala Ser Ala Arg Phe Arg Gln Trp His Pro Gly  
 20 25 30  
 Pro Gly Ser Arg Pro Trp Thr Gly Pro Gly Pro Arg Pro Arg Thr Arg  
 35 40 45  
 Xaa Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys Leu Gly  
 50 55 60  
 Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile Tyr Leu  
 65 70 75 80  
 Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Ser Ser Trp Gly  
 85 90 95  
 Leu Ser Gln Gly  
 100

<210> 802  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 802

Xaa Glu Thr Gln Ala Ile Val Cys Gln Gln Leu Asp Leu Thr His Leu  
1 5 10 15

Lys Gly Ala

<210> 803

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 803

Gly Thr Arg Asp Val Arg Arg Val Pro Gly Val Ala Pro Thr Leu Val  
1 5 10 15

Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg Pro Phe Met Cys Ala Tyr  
20 25 30

Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu Ser His Leu Gln Met His  
35 40 45

Ser Arg Xaa Ala His Trp  
50

<210> 804

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

786

<220>  
 <221> SITE  
 <222> (120)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (135)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (136)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 804  
 Phe Lys Ser Tyr Leu Gly Asp Thr Ile Glu Gly Ser Leu Gln Val Thr  
   1                  5                  10                  15  
 Gly Pro Glu Ile Pro Gly Ser Thr His Ala Ser Ala Glu Ser Leu Ser  
                   20                  25                  30  
 Arg Arg Lys Leu Asp Thr Gly Thr Gly Ser Ala Met Arg Leu Leu Pro  
           35                  40                  45  
 Arg Leu Leu Leu Leu Leu Leu Val Phe Pro Ala Thr Val Leu Phe  
   50                  55                  60  
 Arg Gly Gly Pro Arg Gly Leu Leu Ala Val Ala Gln Asp Leu Thr Glu  
   65                  70                  75                  80  
 Asp Glu Glu Thr Val Glu Asp Ser Ile Ile Glu Asp Glu Asp Asp Glu  
                   85                  90                  95  
 Ala Xaa Val Glu Glu Asp Glu Xaa Thr Asp Phe Val Glu Asp Lys Glu  
           100                  105                  110  
 Glu Glu Asp Val Ser Gly Glu Xaa Glu Thr Leu Pro Ser Ala Asp Thr  
   115                  120                  125  
 Thr Ile Leu Phe Leu Lys Xaa Xaa Ile Phe Arg Gln  
   130                  135                  140

<210> 805  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (119)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (120)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (124)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 805

Phe Glu Ala Asn Arg Gln Arg Ala Thr Met Ala Val Ala Arg Ala Ala  
 1 5 10 15

Leu Gly Pro Leu Val Thr Gly Leu Tyr Asp Val Gln Ala Phe Lys Phe  
 20 25 30

Gly Asp Phe Val Leu Lys Ser Gly Leu Ser Ser Pro Ile Tyr Ile Asp  
 35 40 45

Leu Arg Gly Ile Val Ser Arg Pro Arg Leu Leu Ser Gln Val Ala Asp  
 50 55 60

Ile Leu Phe Gln Thr Ala Gln Asn Ala Gly Ile Ser Phe Asp Thr Val  
 65 70 75 80

Cys Gly Val Pro Tyr Thr Ala Leu Pro Leu Ala Thr Val Ile Cys Ser  
 85 90 95

Thr Asn Gln Ile Pro Met Leu Ile Xaa Arg Lys Glu Thr Lys Asp Tyr  
 100 105 110

Gly Thr Lys Arg Leu Val Xaa Xaa Ile Leu Ile Xaa Xaa Lys Leu Phe  
 115 120 125

Asn His

788

130

<210> 806  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 806  
Val Ala Asp Ile Ala Trp Trp Phe Arg Arg Arg Ile Phe Ile Ala Val  
1 5 10 15  
Leu Arg Cys Asn Ser Ser Ile Ser Asp Ala Glu Ser Met Met Ser Ala  
20 25 30  
Ile Phe His  
35

<210> 807  
<211> 72  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (7)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (21)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (42)  
<223> Xaa equals any of the naturally occurring L-amino acids



<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (61)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (65)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (67)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 807  
 Asp Trp Arg Gln Thr Ser Xaa Ser Gly Ala His Gly Arg Leu Lys Pro  
 1 5 10 15  
 Trp Xaa Asn Pro Xaa Ala Arg Arg Asp Ala Arg Glu Asp Arg Ala Thr  
 20 25 30  
 Trp Lys Ser Asn Tyr Xaa Leu Lys Ile Xaa Gln Arg Ile Gly Met Ile  
 35 40 45  
 Ile Leu Lys Trp Val Xaa Leu Val Gly Ser Glu Tyr Xaa Met Val Gly  
 50 55 60  
 Xaa Pro Xaa Xaa Ser Met Ala Ser  
 65 70

<210> 808  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 808

Pro Ser Leu Lys Gly Thr Lys Ala Gly Asn Asp Leu Val Ser Leu Arg  
1 5 10 15

Ala Ala Arg Thr Leu Arg Pro Pro Gly Thr Lys Pro Gly Xaa Gly Ala  
20 25 30

Thr Phe Gly Pro Gly Leu Ser Glu Arg Ala Ser Ala Gln Arg Gly Ser  
35 40 45

Gly Gln Leu Xaa His  
50

<210> 809

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 809

Ala	Xaa	Glu	Tyr	Thr	Leu	Arg	Thr	Ser	Gly	Leu	Thr	Val	Arg	Pro	Xaa
1					5				10					15	

Thr	Ser	Gly	Pro	Gly	Cys	Xaa	Cys	Gln	Gly	Gly	Leu	Ser	Asp	Leu	Arg
			20					25						30	

Met	Gly	Xaa	Met	Glu	Trp	Xaa	Arg	Arg	Asp	Ala	Gly	Val	Xaa	Ala	Gly
		35					40						45		

Xaa	Asp	Arg	Ser	Xaa	Thr	His	Glu	Cys	Gln	Val	Gln	Val	Val	Arg	Val
	50					55					60				

Gly	Asp	Met	Ser	Leu	Glu
65					70

&lt;210&gt; 810

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

<222> (4)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (22)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (39)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 810  
Xaa Ile Xaa Xaa Cys Gly Phe Glu Pro Pro His Phe Leu Thr Leu Asn  
1 5 10 15  
Leu Xaa Met His Arg Xaa Ser Cys Pro Leu Asp Cys Lys Val Tyr Val  
20 25 30  
Gly Ile Leu Gly Thr Met Xaa  
35

<210> 811  
<211> 27  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (22)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (25)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 811

Gly Arg Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 1 5 10 15

Lys Lys Lys Lys Lys Xaa Pro Xaa Xaa Gly Pro  
 20 25

<210> 812

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 812

Arg Arg Arg Xaa Arg Pro Ala Pro Pro Pro Gly Ala Cys Leu His Leu  
 1 5 10 15

Arg Leu Pro Lys Xaa Leu Gly Gln Arg Leu Asp Ala Arg His Gln Gly  
 20 25 30

Pro Val Glu Val Leu Gln Glu Glu Arg Arg Pro Arg Pro Arg Leu Pro  
 35 40 45

Arg Pro Ala Leu Ala Thr Leu Ser Ala Arg Phe Thr Asn Lys Leu Ser  
 50 55 60

Asp Pro Lys Lys Lys Lys Lys Lys  
 65 70

<210> 813

<211> 27

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

794

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 813

Asn	Ser	Ala	Xaa	Xaa	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
1				5				10						15	

Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			20					25			

&lt;210&gt; 814

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 814

Asn	Ser	Ala	Gln	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
1				5				10						15	

Lys	Lys	Lys	Lys	Lys	Lys	Lys	Xaa
							20

&lt;210&gt; 815

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 815

Phe	Asp	Gln	Arg	Thr	Arg	Ile	Thr	Arg	Pro	Gln	Arg	Arg	Val	Phe	Xaa
1				5					10					15	

Ala	Ser	Xaa	Ser	Pro	Pro	Lys	Xaa	Ile	Thr	Asn	Cys	Ile	Tyr	Xaa	Lys
			20					25					30		

Ile	Asn	Arg	Tyr	Xaa	Xaa	Leu	Asn	Ile	Ala	Ile	Gln	Ile	Xaa
	35						40					45	

<210> 816

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 816

Asn	Ser	Ala	Xaa	Leu	Lys	Gln	Thr	Gly	Leu	Lys	Gly	Val	Thr	Phe	Asn
1				5					10					15	

Lys	Arg	Met	Lys	Met	Xaa	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			20					25					30		

Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Xaa	Pro	Gly	Gly	Xaa	Pro	Pro	Pro
		35					40						45		

Pro	Xaa	Pro	Pro
		50	

<210> 817

<211> 113

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)



797

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 817

Xaa Ser Gly Arg Gly Gly Ser His Ser Arg Asn Leu Val Leu Phe Phe  
1 5 10 15

Pro Gln Leu Gly Lys Arg His Met Ser Leu Ala Xaa Pro Ile Ala Asn  
20 25 30

Pro Val Val Gly Phe Leu Ala Tyr Ser Arg Pro Ser Val Leu Pro Gly  
35 40 45

Trp His Arg Pro His Arg Thr Ser Arg Val Gly Leu Ser Gly Ser Ser  
50 55 60

Thr Ala Gly Xaa Xaa Asn Ser Arg Phe Gly Gly Cys Ser Phe Gln Ala  
65 70 75 80

Gly Asp Thr Leu Gly Pro Val Val Arg Ser Pro Val Leu Arg His Leu  
85 90 95

Val Trp Asn Xaa Arg Leu Ala Val Ser Ile Gly Val Gly Xaa Cys Ala  
100 105 110

Ala

<210> 818

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (11)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (23)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (27)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (39)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (56)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (57)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (77)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (79)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (82)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (85)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (87)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (93)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (94)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (97)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (105)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (108)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (116)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (121)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (127)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 818

Phe Phe Phe Phe Xaa Lys Gly Thr Xaa Thr Xaa Leu Pro Phe Xaa Pro  
 1 5 10 15

Asn Gln Asn Gln Asn Pro Xaa Gln Ser Ile Xaa Lys Ser Lys Pro Gly  
 20 25 30

Gln Asn Gln Asn Glu Xaa Xaa Lys Gln Ser Lys Ser Ser Gln Lys Gln  
 35 40 45

Lys Pro Lys Cys Arg Tyr Arg Xaa Xaa Val Gly Asp Gln Ala Thr Leu  
 50 55 60

Pro Leu Lys Trp Ser Gly Xaa Xaa Pro Lys Thr Ser Xaa Thr Xaa Phe  
 65 70 75 80

Xaa Xaa Ser Gly Xaa Gln Xaa Pro Val Pro Ser Gln Xaa Xaa Ala Ala  
 85 90 95

Xaa Leu Ile Leu Cys Gly Gly Leu Xaa Asn Ala Xaa Leu Ala Arg Cys  
 100 105 110

Ser Thr Gly Xaa Ile Ala Tyr Pro Xaa Val Leu Ser Gly Ser Xaa Ser  
 115 120 125

Leu Lys Leu Ala  
 130

801

<210> 819  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 819  
 Asn Ser Ala Xaa Gln Thr Thr Pro Ser Leu Ser Tyr Val Phe Leu Leu  
   1                  5                  10                  15  
 Gln Thr Thr Arg Gln Leu Leu Lys Pro Ala Ile His Val Tyr Phe Asn  
           20                  25                  30  
 Lys Leu Met Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
       35                  40                  45  
 Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Gly Pro Pro Pro Pro  
   50                  55                  60

<210> 820  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (17)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

802

<221> SITE  
 <222> (26)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 820  
 Asp His Thr Ser Asp Thr Xaa Ala Trp Val Thr Glu Arg Asp Ser Val  
           1                  5                  10                  15

Xaa Gly Lys Glu Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Val  
                   20                  25                  30

Pro Asn Trp Pro Tyr Xaa Gly Ser  
           35                  40

<210> 821  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 821  
 Ala Xaa Pro Thr Gln Gln Ser Phe Pro Gln Leu Pro Arg Arg Lys Gly  
           1                  5                  10                  15

Pro Ser Trp Val Trp Asp His Lys Gly Gly Asp Cys Thr Pro Leu Pro  
           20                  25                  30

Leu Gly Pro Gly Cys Gly Gln Arg Pro Pro Cys Val Ser Arg Val Thr  
           35                  40                  45

Val Pro Leu Ser Cys Asp Ala Ile Ser Val Cys Ala Trp Ser Pro Gln  
           50                  55                  60

803

<210> 822  
<211> 61  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (23)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 822  
His Leu Cys Phe Lys Trp Gly Ser Pro Cys Arg Gly Phe Ile Gly His  
1 5 10 15  
Trp Leu Ser Lys Cys Gln Xaa Trp Ala Gly Gly Gly Thr Glu Pro Pro  
20 25 30  
Gln His Cys Ala Leu Val Glu Lys Ala Leu Thr Cys His Ala Pro Leu  
35 40 45  
Lys Pro Pro Leu Leu Thr Cys Leu Leu His Pro Ser His  
50 55 60

<210> 823  
<211> 73  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (57)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (72)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 823  
Thr Ala Gly Arg Trp Pro Trp Lys Ser Glu Ser Ala Lys Glu Cys Val  
1 5 10 15

804

Thr Thr His Leu Pro Asn Gln Leu Ala Leu Lys Met Asp Gly Ala Gly  
                   20                  25                  30  
 Ala Ser Gly Pro Tyr Pro Ser Val Ala Gly Ser Arg Glu Trp Thr Gly  
                   35                  40                  45  
 Xaa Ala Gly Ala Ala Arg Ala Arg Xaa Val Met Val Cys Val Gly Gly  
                   50                  55                  60  
 Arg Arg Arg Arg Arg Gly Cys Xaa Val  
                   65                  70

<210> 824  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (12)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 824  
 Pro Arg Xaa Arg Arg Gln Gln Gln Pro His His Xaa Val Ala Asp Gly  
           1                  5                  10                  15  
 Pro His Ala Gly Gly Pro Leu Pro Ala Leu Xaa Arg Arg Leu Xaa Leu  
                   20                  25                  30

Pro Leu



<210> 825  
<211> 21  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (6)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (7)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (19)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 825  
Pro Tyr Ser Glu Ser Xaa Xaa Asn Ser Leu Ala Val Val Leu Gln Arg  
1 5 10 15

Arg Asp Xaa Glu Asn  
20

<210> 826  
<211> 56  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (48)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (56)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 826  
Met Ser Glu Ala Cys Ile Val Ile Ile Ser Tyr Phe Phe Pro Leu Asp  
1 5 10 15

Pro Ser His Gln Met Phe Val Asp Phe Ile Arg Ile Phe Lys Leu Pro  
20 25 30

806

Ala Ser Gly Phe Val Glu Leu Gly Ile Ser Val Ser Leu Ile Phe Xaa  
35 40 45

Leu Leu Ser Cys Thr Tyr Phe Xaa  
50 55

&lt;210&gt; 827

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 827

Asn Ser Lys Xaa Ile Thr Ile Lys Lys Ala Gly Thr Pro Ala Gly Thr  
1 5 10 15

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Thr Ala Ala Arg Arg  
20 25 30

Arg Gln Lys Gly Thr Ala Ala Arg Xaa Arg Gln Lys Gly Ala Xaa Glu  
35 40 45

Arg Arg Arg Gln Lys Gly  
50

&lt;210&gt; 828

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 828

Leu Val Phe Thr Glu Thr Leu Arg Glu His Lys Phe Met Gly Phe Leu  
 1 5 10 15

Met Met Ile Leu Leu Gly Ile Met Ser Tyr Ser Leu Ser Ser Leu Met  
 20 25 30

Asn Val Lys Leu His Cys Ser Gln Arg Phe Xaa Leu Leu Ser Thr Ala  
 35 40 45

Ile Asn His Gly His Ser Pro Xaa Asn Ile Ile Phe Phe Leu Leu Lys  
 50 55 60

Glu Lys Asn Gly Lys Lys Leu Gln Gly Asn Gly Asn Tyr Tyr  
 65 70 75

&lt;210&gt; 829

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 829

Ser Ala Glu Glu Lys Lys Leu Thr Arg Ile Pro Ser Val Thr Ala Ser  
 1 5 10 15

Glu Gln Gly Arg Ala Gln Arg Arg Ile Pro Ala Pro Arg Arg Gly Ala  
 20 25 30

Gly His Val Ala Tyr Gly Arg Pro Ala Pro Arg Arg Arg Ser Trp Gly  
 35 40 45

Ala Gln Val Leu Leu Ile Glu Ala Gln Pro Val Asp Gly Val Arg Pro  
 50 55 60

Val Ala Ala Pro Gly Ala Pro Gly Pro Gly Leu Pro Gly Val Gly Leu  
 65 70 75 80

Leu Gly Asn Ala Ala Gln Ser Gly Trp  
 85

808

<210> 830  
<211> 43  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (43)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 830  
Pro Leu Ile Phe Ile Asn Ser Arg Ile His Thr Asp Ser Pro Gly Ile  
1 5 10 15  
Val Pro Ser His Ser Glu Asp Ala Leu Arg Thr Leu Gln Ile Leu Leu  
20 25 30  
Pro Tyr Ile Thr Leu Asn Ser Gly Leu Arg Xaa  
35 40

<210> 831  
<211> 110  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (34)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (66)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (87)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (89)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 831

Lys Asp Ser Leu Asp Ser Gly Lys Leu Leu Gly Ser Gln Leu Gln Phe  
1 5 10 15

Ile Thr Val Lys Gly Gln Arg Leu Arg Ser Ala Lys Gly Gly Gly Ala  
20 25 30

Gln Xaa Arg Ser Thr Thr Asp Glu Ala Thr Ala Ser Ile Cys Pro Leu  
35 40 45

Pro Val Glu Pro Tyr Arg Gln His Leu Ile Leu Thr Ala Thr Cys Asp  
50 55 60

Asn Xaa Gln Glu Val Leu Pro Ile Leu Pro Thr Arg Ala Ala Ser Leu  
65 70 75 80

Gly Asp Leu Cys Val Pro Xaa Phe Xaa Val Cys Leu Gly Asp Arg Val  
85 90 95

Trp Xaa Xaa Leu Gly Arg Xaa Arg Val His Gly Gly Asp Ser  
100 105 110

<210> 832

<211> 50

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 832

Gln Arg Ser Ile Leu Val Thr Trp Phe His Cys His His Leu Val Asp  
1 5 10 15

Val Gln Phe Xaa Thr Ile Leu Ser Ala Pro Ser Gly Ser Leu Ala His

810

20 25 30  
Ser Leu Leu Cys Asn Cys Trp Arg Ile Thr Ala Glu Phe Leu Ala Val  
35 40 45  
Leu Ser  
50

<210> 833  
<211> 47  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<220>  
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<400> 833

811

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 1 5 10 15

Xaa Thr Thr Leu Gly Gly Arg Ser Thr Gly Leu Val Ile Glu Leu Xaa  
 20 25 30

Leu Xaa Arg Leu Leu Xaa Cys Xaa Met Asn Cys Asn Ile Cys Leu  
 35 40 45

&lt;210&gt; 834

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 834

Glu Xaa Xaa Thr Glu Gly Tyr Gly Cys Glu Arg Arg Gln Lys Gly Thr  
 1 5 10 15

Ala Ala Arg Arg Xaa Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys  
 20 25 30

Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg  
 35 40 45

Gln Lys Val Arg Leu Arg Glu Asp Asp Arg Arg Ile Arg Leu Arg Glu  
 50 55 60

Asp Asp Arg Arg Glu Asn Leu Ser Ser Thr Leu Asn Leu Pro Thr Glu  
 65 70 75 80

Pro Ser Lys Ser Pro Cys Lys Phe Asn Cys  
 85 90

812

<210> 835  
 <211> 51  
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     1                    5                    10                    15  
 Gly Ser Leu Cys Cys Leu Tyr Cys Ile Asp Leu Xaa Tyr Arg Cys Leu  
             20                    25                    30  
 Phe Ile Lys Lys Lys Ile Gln Lys Xaa Lys Lys Lys Ile Asn Lys Xaa  
             35                    40                    45  
 Lys Lys Xaa  
             50

<210> 836  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens



813

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 836

Ser Ser Leu Gln Lys Asn Leu Val Leu Glu Tyr Phe Leu Lys Gly Ile  
 1 5 10 15

Leu Asn Thr Ile Lys Thr Ala Phe Phe Phe Pro Ala Ser Ile Gln Pro  
 20 25 30

Thr Trp Phe Cys Phe Asn Lys Ser Leu Glu Lys Leu Ile Xaa Xaa  
 35 40 45

&lt;210&gt; 837

&lt;211&gt; 733

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 837

gggatccgga gcccaaactct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60  
 aattcgaggg tgcaccgtca gtcttcctct tcccccaaa acccaaggac accctcatga 120  
 tctcccgagc tcctgaggtc acatgcgtgg tgggtggacgt aagccacgaa gaccctgagg 180  
 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240  
 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300  
 ggctgaatgg caaggagtac aagtgaagg tctccaacaa agccctccca acccccatcg 360  
 agaaaaccat ctcaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420  
 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctgggc aaaggcttct 480  
 atccaagcga catcgccgtg gagggtggaga gcaatgggca gccggagaac aactacaaga 540  
 ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600  
 acaagagcag gtggcagcag gggaacgtct tctcatgtc cgtgatgcat gaggtctctg 660  
 acaaccacta cagcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720  
 gactctagag gat 733

&lt;210&gt; 838

&lt;211&gt; 5

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 838

Trp Ser Xaa Trp Ser  
1 5

<210> 839

<211> 86

<212> DNA

<213> Homo sapiens

<400> 839

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cccgaaatat ctgccatctc aattag 86

<210> 840

<211> 27

<212> DNA

<213> Homo sapiens

<400> 840

gcggcaagct ttttgcaaag cctaggc 27

<210> 841

<211> 271

<212> DNA

<213> Homo sapiens

<400> 841

ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60  
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gcccctaact ccgcccagtt ccgcccattc tccgcccatt ggctgactaa ttttttttat 180  
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggcctt 240  
ttttggaggc ctaggctttt gcaaaaagct t 271

<210> 842

<211> 32

<212> DNA

<213> Homo sapiens

<400> 842

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815

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<213> Homo sapiens

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31

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<400> 844  
ggggactttc cc

12

<210> 845  
<211> 73  
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ccatctcaat tag 73

<210> 846  
<211> 256  
<212> DNA  
<213> Homo sapiens

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caattagtca gdaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc 120  
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180  
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240  
cttttgcaaa aagctt 256

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/05881

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : C07H 21/04; C07K 5/04, 16/00; G01N 33/53

US CL : 536/23.1; 530/300, 387.9; 436/501

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1; 530/300, 387.9; 436/501

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

East, GenEmbl, EST, GeneSeq, PIR-63, SwissProt, SPTREMBL, Issued patents sequence database: SEQ ID NO:1 and monoamine adj oxidase

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	ZHU et al. Promoter organization and activity of human monoamine oxidase (MOA) A and B genes. J. Neurosci. November 1992, Vol. 12, No. 11, pages 4437-4446, especially pages 4438-4439.	1-12, 14-16, 20-23 ----- 13, 17-19
X ----- Y	CHEN et al. The deduced amino acid sequences of human platelet and frontal cortex monoamine oxidase B are identical. J. Neurochem. July 1993, Vol. 61, No. 1, pages 187-190, especially pages 188-190.	1-7, 11-12 ----- 19
X ----- Y	GRIMSBY et al. Human monoamine oxidase A and B genes exhibit identical exon-intron organization. Proc. Natl. Acad. Sci., USA. May 1991, Vol. 88, pages 3637-3641, especially 3638-3640.	1-12, 20-21 and 23 ----- 17-19

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A*	document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means		
*P* document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

01 JUNE 2000

Date of mailing of the international search report

05 JUL 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
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CHEMICAL MATRIX

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/05881

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	BACH et al. cDNA cloning of human liver monoamine oxidase A and B: Molecular basis of differences in enzymatic properties. Proc. Natl. Acad. Sci., USA. July 1988, Vol. 85, pages 4934-4938, especially pages 4935-4936.	1-16, 20-23 ----- 17-19
Y	US 5,783,680 A (BRUNNER et al.) 21 July 1998, columns 5-15.	13, 17-19

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/05881

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-23, SEQ ID NO:1

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/05881

### BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s) 1-10 and 21, drawn to isolated nucleic acid sequences, a gene, a recombinant vector and host cells comprising the sequences.

Group II, claim(s) 11-12 and 14, drawn to an isolated polypeptide and a recombinant host cell expressing the polypeptide.

Group III, claim(s) 13, drawn to an antibody.

Group IV, claim(s) 15-16, drawn to a method of making a polypeptide and the polypeptide made.

Group V, claim(s) 17, drawn to a method of preventing, treating, or ameliorating a medical condition by administering a polypeptide or a polynucleotide.

Group VI, claim(s) 18, drawn to a method of diagnosis using a polynucleotide.

Group VII, claim(s) 19, drawn to a method of diagnosis using a polypeptide.

Group VIII, claim(s) 20 and 23, drawn to a method of identifying a binding partner to a polypeptide.

Group IX, claim(s) 22, drawn to a method of identifying biological activity.

In addition, each isolated nucleic acid represented by SEQ ID NO: X is a separate product, not necessarily related to any other nucleic acid represented by SEQ ID NO: X. Each polypeptide is likewise considered a separate product, not necessarily related to any other polypeptide sequence, or to any nucleotide sequence. Applicant is required to elect either ten nucleic acid sequences or one polypeptide sequence for search.

The inventions listed as Groups I-IX do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: every nucleic acid sequence claimed is not unique (SEQ ID NO: 1 is not unique, see the Search report), and therefore does not represent a special technical feature. As the nucleic acid would be the "linking" feature, and the nucleic acid is not a special technical feature, the claims do not relate to a single inventive concept. Because there is no single inventive concept, a method of use is not included with the nucleic acids of Group I.

Although unity of invention is lacking for Groups I-IX, as previously set forth, no invitation to pay for a search for extra groups has been made. However, unity of invention is also lacking with regard to sequences and applicant was invited to pay for a search for additional groups of sequences. Applicant elected only SEQ ID NO:1, therefore no extra search fees are due.